CLAS C&C
Chair: Pamela Bedore
Agenda Part 2 – Additional Materials
9.6.2020

2020-224 ANTH 5395 Add Special Topic: Race, Gender, and Science

UCONN | COLLEGE OF LIBERAL ARTS AND SCIENCES
COMMITTEE ON CURRICULA AND COURSES

Proposal to offer a new or continuing 'Special Topics' course (xx95; formerly 298)

Last revised: September 24, 2013

Understanding the unique character of special topics courses: 'Special Topics', in CLAS curricular usage, has a narrow definition: it refers to the content of a course offering approved on a provisional basis for developmental purposes only. Compare this definition with that of variable topics (xx98) courses.

It is proposed by a department and approved conditionally by the college only with a view toward its eventual adoption as a permanent departmental offering. For this reason, such conditional approval may be renewed for not more than three semesters, after which the course must be either brought forward for permanent adoption, or abandoned. The factotum designation xx95 is to be assigned to all such developmental offerings as proposed.

Note: Such courses are normally reviewed by the Chair of CLAS CC&C, and do not require deliberation by the Committee unless questions arise. Courses must be approved prior to being offered, but are not subject to catalog deadlines since they do not appear in the catalog. Special Topics courses are to be employed by regular faculty members to pilot test a new course, with the idea that it is likely to be proposed as a regular course in the future.

Submit one copy of this form by e-mail to the Chair of CLAS after all departmental approvals have been obtained, with the following deadlines:

(1) for Fall listings, by the first Monday in March (2) for Spring listings, by the first Monday in November

1. Date of this proposal: August 18, 2020
2. Semester and year this xx95 course will be offered: Fall, 2020
3. Department: Anthropology

4. Course number and title proposed: ANTH 5395: RACE, GENDER, & SCIENCE
5. Number of Credits: 3
6. Instructor: DEBORAH BOLNICK
7. Instructor's position: ASSOCIATE PROFESSOR
(**Note**: in the rare case where the instructor is not a regular member of the department's faculty, please attach a statement listing the instructor's qualifications for teaching the course and any relevant experience).
8. Has this topic been offered before? NO If yes, when?
9. Is this a (X) 1st-time, ( ) 2nd-time, ( ) 3rd-time request to offer this topic?
10. Short description: This course will examine the ways that race, sex, and gender have been conceptualized and studied scientifically, and will evaluate how they are constructed and understood across various disciplines, including anthropology, biology, psychology, sociology, medicine, forensics, and women's and gender studies. By critically assessing biopolitical claims about identity, group belonging, racial difference, sex/gender binaries, human inequalities and rights, and the biological basis of complex traits, behaviors, and health disparities, we will evaluate how such claims both draw on and shape scientific research, and how knowledge about human similarity and difference is produced in science and society.
11. Please attach a sample/draft syllabus to first-time proposals.
12. Comments, if comment is called for:
13. Dates approved by:
Department Curriculum Committee:
Department Faculty: 8.18.2020

14. Name, Phone Number, and e-mail address of principal contact person:
César E. Abadía-Barrero. 6179993612. Cesar.abadia@uconn.edu

Supporting Documents

If required, attach a syllabus and/or instructor CV to your submission email in separate documents. This version of the CV will be made public. Do not include any private information.

ANTH 5395: RACE, GENDER, & SCIENCE
FALL, 2020

Tuesday 9:30 am – 12:15 pm
Beach Hall 404

Instructor: Dr. Deborah Bolnick
Email: deborah.bolnick@uconn.edu
Office Location: Beach Hall 437
Office Phone: TBD
Office Hours: Thursday 10-12 and by appointment

Course Website: https://huskyct.uconn.edu

COURSE DESCRIPTION:
This course will explore the intersections of race, gender, and science. We will examine the ways that race, sex, and gender have been conceptualized and studied scientifically, and will evaluate how they are constructed and

understood across various disciplines, including anthropology, biology, psychology, sociology, medicine, forensics, and women's and gender studies. By critically assessing biopolitical claims about identity, group belonging, racial difference, sex/gender binaries, human inequalities and rights, and the biological basis of complex traits, behaviors, and health disparities, we will evaluate how such claims both draw on and shape scientific research, and how knowledge about human similarity and difference is produced in science and society. We will also work together throughout the semester to develop effective strategies for discussing and conveying the complexities of race and gender in the classroom, in research contexts, and to broader publics.

In this course, we will begin by tracing the history of racial science and scientific racism, considering the origins, contexts, applications, and societal impacts of race science. We will then consider scientific studies of sex, gender, and human sexuality along with the application and interpretation of those studies in western society. By drawing on recent scientific research as well as critical race theory, feminist/queer theory, Indigenous and STS perspectives, and postcolonial/decolonial studies, we will evaluate the nature and significance of human biological diversity with respect to both race and gender. Finally, we will explore a number of recent scientific controversies, including (a) the use of race and sex in medical diagnosis, access, and treatment, (b) claims about differences in IQ or athletic aptitude by race or sex, (c) genetic approaches to inferring race, ethnicity, sex, ancestry, and identity, (d) the intersection of race, sex, crime, and forensics, and (e) comparisons of transgender and "transracial" identities. In each case, we will carefully and critically evaluate the scientific evidence, consider how data have been presented and interpreted in both the scientific literature and popular culture, and discuss pedagogical approaches to teaching about these controversies in college classrooms.

COURSE REQUIREMENTS:

1. **Class Participation (25%).** Each student is expected to complete all assigned readings before class and participate fully in all discussions.

2. **Reading Questions and Comments (25%).** To facilitate in-class discussions, each student is expected to prepare and post at least one question or comment per reading on the course website by 5 pm ET on the day before class. In your comments, you might choose to raise a question or concern about the reading, discuss a point that seems particularly salient, identify key points to discuss in classroom settings and suggest activities or other ways to teach those topics, propose additional research that is needed to resolve an issue, etc. When appropriate, a single comment or suggested classroom exercise can touch on multiple readings. Once you have posted your comments, you will be able to see those posted by your classmates.

3. **Seminar Coordination (10%).** Each student will lead or co-lead two classes over the course of the semester. Student leaders are expected to (a) briefly present the core ideas found in the readings (PowerPoint slides or handouts may be prepared if you think they would be helpful), and (b) prepare a set of topics, questions, and other relevant classroom activities to help structure the class period and guide our discussion, drawing on the reading responses posted on the course website on HuskyCT.

5. **Position Statements (10%).** At the beginning of the semester, each student will write a 1-2 page (double-spaced) position statement that briefly describes (a) their views on race and gender, (b) any significant challenges they have faced when teaching or learning about these topics in the college classroom, and (c) key questions that they hope to address this semester. This position statement (5%) will be due on January 29. A second 2-3 page (double-spaced) position statement (5%) describing the student's views on race and gender, as well as how these concepts can most effectively be used in science and taught in the classroom, will be due on April 23. Position statements should be submitted electronically via the course website by 11:59 pm ET on the due date.

6. **Project and Presentation (30%).** Each student will work independently or with one other student to develop lesson plans for a teaching activity (or set of activities) or other pedagogical product that addresses a key topic or issue from this course and is intended for use in the college classroom. The specific format and topic are for you to decide. A one-page project proposal (5%) will be due on March 12. The final product (15%) will be due on April 30, and students will give a 10 minute presentation in class that day about their project (10%). The

proposal and project should be submitted electronically via the course website by 11:59 pm ET on the date they are due.

REQUIRED READINGS:

1. PDFs of journal articles and book excerpts will be available via the course website on HuskyCT.
2. The Immortal Life of Henrietta Lacks. 2010. Rebecca Skloot. Crown Publishing Group.

CLASSROOM POLICIES:

Every student has the right to learn and the responsibility to not deprive others of their right to learn. In order for you and your fellow students to get the most out of this class, please abide by the following policies:

(1) Attend all classes and arrive on time whenever possible.

(2) Do not use your cell phone, send emails, visit websites, etc. during class.

(3) No audio or video recording of any presentation, class activity, or discussion is permitted without prior written approval from the instructor.

(4) All course communication with me and your fellow students should be professional and courteous. It is expected that you proofread all of your written communication, including discussion posts, assigment submissions, and email messages. If you need a netiquette refresher, please see The Core Rules of Netiquette guide at http://www.albion.com/netiquette/corerules.html

(5) A number of sensitive and difficult topics may come up in discussion in this course. Discussions of race, gender, sexuality, identity, privilege, oppression, discrimination, structural violence, and power challenge all of us. Students are expected to maintain civility at all times, both in and out of the classroom. I welcome and encourage you to express your ideas, and to listen carefully to others even when your ideas differ. I do not expect you to agree with the opinions and perspectives of all of the authors we read (I don't!), nor do I expect you to always agree with me or your classmates. What I do expect is that you to engage thoughtfully with the materials and perspectives presented, as a scholar and intellectual. I encourage discussion about points of disagreement, so that we can learn from and with each other. However, I expect you to remain polite and respectful even during heated debates, and will not tolerate aggressive or hateful behavior in the classroom. If you have trouble adhering to these ground rules or that they are being broken, please contact me so we can discuss it.

(6) Name/gender usage in class: Please let me know your preferred name and pronouns, especially if your name differs from what appears on the class roster, so we can be sure to use them in class.

(7) Please let me know if there is anything else you want me to know about you. If, at any point in the semester, something is affecting your ability to engage with this course or preventing you from performing satisfactorily, please let me know by email or in an in-person conversation so we can discuss potential solutions.

GRADING POLICIES:

If an assignment is turned in late without previously obtaining permission, the assignment grade will be lowered by 10% for each day that the assignment is late. If a serious issue (i.e. illness, family death, etc.) arises that may prevent you from attending class or turning in an assignment on time, contact me by e-mail as soon as possible to arrange an assignment extension.

Final letter grades will be assigned using the following scale: A (93-100%), A- (90-92%), B+ (87-89%), B (83-86%), B- (80-82%), C+ (77-79%), C (73-76%), C- (70-72%), D+ (67-69%), D (63-66%), D- (60-62%), F (0-59%).

Re-grading Policy: If you believe that an assignment has been graded incorrectly, submit a written request for a re-grade within one week of when the graded assignment was returned. The written request should include an

explanation of your position and be attached to the graded assignment. If you suspect that a simple addition error was made, let me know and I will correct the mistake.

Attendance: I do not formally take attendance, but I am aware of who comes to class and who does not. Attendance is necessary to earn points for class participation, and consistent attendance can help raise your grade if you end up with a borderline final grade. Whether or not you come to class, you are responsible for keeping up with what happens in class.

Religious Observances: Please review the schedule of class meetings and assignment due dates, and let me know as soon as possible if you will need to miss a class or assignment due to religious practices. I am happy to make accomodations and give you an opportunity to complete missed work within a reasonable amount of time after the absence.

STUDENT CONDUCT AND ACADEMIC INTEGRITY:

All students are expected to conduct themselves in accordance with UConn's Student Conduct Code (https://community.uconn.edu/the-student-code/). This course also expects all students to act in accordance with the Guidelines for Academic Integrity at the University of Connecticut. Because questions of intellectual property are important to the field of this course, we will discuss academic honesty as a topic and not just a policy. If you have questions about academic integrity or intellectual property, please consult UConn's Policy on Scholarly Integrity in Graduate and Post-Doctoral Education and Research (https://policy.uconn.edu/2014/04/11/policy-on-scholarly-integrity-in-graduate-education-and-research/) and contact me with any questions.

Any work submitted by a student in this course for academic credit must be the student's own work. You are encouraged to study together and to discuss information with other students, but you should outline/write your position statements and reading responses by yourself. Cheating and plagiarism are taken very seriously at the University of Connecticut. As a student, it is your responsibility to avoid plagiarism. If you plagiarize or commit another act of academic dishonesty, penalties may include receiving a failing grade for the assignment, failing the course, and having your actions reported to the Academic Misconduct Hearing Board for disciplinary action. If a student's written work closely mimics that of another student or source, academic dishonesty may be suspected. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will be penalized. For more information, see http://web.uconn.edu/irc/PlagiarismModule/intro_m.htm.

COPYRIGHT:

Materials used in this class — including, but not limited to, my lectures, notes, handouts, Powerpoint slides, and assignments — are protected by state common law and federal copyright law. They are my own original expression and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. No audio or video recording of any presentation, class activity, or discussion is permitted without my prior written approval. If you are so authorized to make a recording, you may not copy the recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me. Any unauthorized copying of class materials is a violation of federal law and may result in disciplinary actions being taken against you. Sharing class materials without written approval may also be a violation of the University of Connecticut's Student Code and an act of academic dishonesty, which could result in further disciplinary action.

STUDENTS WITH DISABILITIES:

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require

accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020, or http://csd.uconn.edu/.

POLICY AGAINST DISCRIMINATION, HARASSMENT, AND INAPPROPRIATE ROMANTIC RELATIONSHIPS:
The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate amorous relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate amorous relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. Additionally, to protect the campus community, all non-confidential University employees (including faculty) are required to report sexual assaults, intimate partner violence, and/or stalking involving a student that they witness or are told about to the Office of Institutional Equity. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help. More information is available at equity.uconn.edu and titleix.uconn.edu.

SEXUAL ASSAULT REPORTING POLICY:
To protect the campus community, all non-confidential University employees (including faculty) are required to report assaults they witness or are told about to the Office of Diversity & Equity under the University's Sexual Assault Response Policy. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help. See https://titleix.uconn.edu for more information.

SAFETY AND EMERGENCY PREPAREDNESS:
In case of inclement weather, a natural disaster, or a campus emergency, the University communicates through email and text message. Students are encouraged to sign up for alerts through http://alert.uconn.edu. Students should be aware of emergency procedures, and further information is available through the Office of Emergency Management at http://publicsafety.uconn.edu/emergency/.

ADDITIONAL RESOURCES AT THE UNIVERSITY OF CONNECTICUT:
The campus environment can be exciting but also challenging and stressful. If you would benefit from counseling or mental health services, see https://counseling.uconn.edu.

SCHEDULE OF CLASS MEETINGS AND DUE DATES:
(TO BE ADJUSTED)

January 22 **Introduction**

January 29 **The Origins of Racial Science and Scientific Racism**
Position Statement #1 Due

Required Readings (~150 pp total):

** indicates readings divided among students, so each student reads only one of these texts*

Smedley A. 1999. Race in North America: Origin and Evolution of a Worldview. Second Edition. Westview Press. pp 13-41, 158-167, 296-303.

Gould SJ. 1981. American polygeny and craniometry before Darwin: Blacks and Indians as separate, inferior species. The Mismeasure of Man. New York: WW Norton and Co. pp 30-72.

Allen, GE. 1997. The social and economic origins of genetic determinism: a case history of the American eugenics movement, 1900-1940 and its lessons for today. (Excerpted) Genetica 99: 78-85.

Tucker WH. 1994. Applying science to society: the eugenics movement in the early twentieth century. The Science and Politics of Racial Research. Urbana: University of Illinois Press. pp 110-133.

*Gobineau A. 1853. The Inequality of the Human Races. London: Jonathan Cape. pp 97-145,168-176.

*Darwin C. 1871. On the races of man. The Descent of Man, and Selection in Relation to Sex. Chicago: Encyclopedia Brittanica. pp 169-203.

*Baker LD. 1998. Anthropology in American popular culture. From Savage to Negro: Anthropology and the Construction of Race, 1896-1954. Berkeley: University of California Press. pp 46-63.

*Grant M. 1916. The Passing of the Great Race. New York: Charles Scribner's Sons. pp 3-55, 82-94.

*Sinnott EW, Dunn LC. 1925. The problems of eugenics. In: Principles of Genetics: An Elementary Text, with Problems. New York: McGraw-Hill Book Co. pp 402-415.

*Hrdlicka A. 1930. Human races. In: Cowdry EV, editor. Human Biology and Racial Welfare. Paul B. Hoeber, Inc. pp 156-183.

*Hooton EA. 1946. Up from the Ape. Revised editor. New York: Macmillan Company. pp 439-455, 572-661.

February 5 **Race and Science after World War II**

Required Readings (~120 pp total):

** indicates readings divided among students*

Reardon J. 2005. *Race to the Finish: Identity and Governance in an Age of Genomics.* Princeton: Princeton University Press. pp 22-73, 92-97.

Jackson JP. 2001. "In ways unacademical": the reception of Carleton S. Coon's The Origin of Races. Journal of the History of Biology 34:247-285.

*Morning A. 2008. Reconstructing race in science and society: biology textbooks, 1952-2002. American Journal of Sociology 114:S106-S137.

*Obasogie OK, Harris-Wai JN, Darling K, Keagy C, Levesque M. 2015. Race in the life sciences: an empirical assessment, 1950-2000. Fordham Law Review 83: 3089-3114.

*Montagu A. 1972. UNESCO Statements on Race. London: Oxford University Press. pp 1-13, 137-155.

*Livingstone FB, Dobzhansky T. 1962. On the non-existence of human races. Current Anthropology 3:279-281.

*Newman MT. 1963. Geographic and microgeographic races. Current Anthropology 4:189-207. (the comments at the end are optional reading)

*Brace CL. 1964. On the race concept. Current Anthropology 5:313-320. (comments are optional)

February 12 **Contemporary Perspectives on Human Biodiversity**

Required Readings (70 pp total, plus video):

Relethford JH. 2003. The palimpsest of the past. Reflections of Our Past. Boulder: Westview Press.

pp 101-122.

Marks J. 2017. What we know, and why it matters. Is Science Racist? Cambridge: Polity Press. pp 106-128.

Karklis L, Badger E. 2015. Every term the census has used to describe America's racial and ethnic groups since 1790. The Washington Post, November 4. http://www.washingtonpost.com/news/wonk/wp/2015/11/04/every-term-the-census-has-used-todescribe-americas-racial-groups-since-1790/

VOX. 2015. The myth of race, debunked in 3 min. www.youtube.com/watch?v=VnfKgffCZ7U

Barbujani G, Ghirotto S, Tassi F. 2013. Nine things to remember about human genome diversity. Tissue Antigens 82:155-164.

Rosenberg NA, Pritchard JK, Weber JL, Cann HM, Kidd KK, Zhivotovsky LA, Feldman MW. 2002. Genetic structure of human populations. Science 298:2381-2385.

Bolnick DA. 2008. Individual ancestry inference and the reification of race as a biological phenomenon. In: Koenig B, Lee S, Richardson S, eds. Revisiting Race in a Genomic Age. New Brunswick: Rutgers University Press. pp 77-85.

Gibbons A. 2014. Shedding light on skin color. Science 346:934-936.

Fan S, Hansen MEB, Lo Y, Tishkoff S. 2016. Going global by adapting local: a review of recent human adaptation. Science 354:54-59.

Optional Background Readings/References:

Mielke JH, Konigsberg LW, Relethford JH. 2006a. The genetic basis of human variation. Human Biological Variation. New York: Oxford University Press. pp 23-49.

Relethford JH. 2001. Evolution and genetic history. Genetics and the Search for Modern Human Origins. New York: Wiley-Liss. pp 20-29.

Mielke JH, Konigsberg LW, Relethford JH. 2006b. Anthropometric variation and pigmentation. Human Biological Variation. New York: Oxford University Press. pp 251, 264-267, 270-279, 286-295.

Optional Readings (For More Advanced Material):

Lawson DJ, van Dorp L, Falush D. 2018. A tutorial on how not to over-interpret STRUCTURE and ADMIXTURE bar plots. Nature Communications 9:3258.

Li JZ, Absher DM, Tang H, Southwick AM, Casto AM, Ramachadran S, Cann HM, Barsh GS, Feldman M, Cavalli-Sforza LL, Myers RM. 2008. Worldwide human relationships inferred from genome-wide patterns of variation. Science 319: 1100-1104.

Fujimura JH, Bolnick DA, Rajagopalan R, Kaufman JS, Lewontin RC, Duster T, Ossorio P, Marks J. 2014. Clines without classes: how to make sense of human variation. Sociological Theory 32:208-227.

February 19 **Genetic Ancestry, Identity, and Belonging**

Required Readings (~68 pp total, plus film and podcast):

Motherland: A Genetic Journey (youtube.com/playlist?list=PL1KkxtKrgdmJl6CE4EilSQK5Sd-iMhEMp)

Rotimi CN. 2003. Genetic ancestry tracing and the African identity: a double-edged sword? Developing World Bioethics 3: 151-158.

Bolnick DA, Fullwiley D, Duster T, Cooper RS, Fujimura JH, Kahn J, Kaufman JS, Marks J, Morning A, Nelson A, Ossorio P, Reardon J, Reverby SM, TallBear K. 2007. The science and business of genetic ancestry testing. Science 318:399-400.

Bryc K, Durand EY, Macpherson JM, Reich D, Mountain JL. 2015. The genetic ancestry of African Americans, Latinos, and European Americans across the United States. American Journal of Human Genetics 96: 1-17.

Sparks Podcast. 2017. The complicated relationship between genes and genealogy. FiveThirtyEight, March 2. (listen online at https://fivethirtyeight.com/features/the-complicated-relationship-between-genes-and-genealogy/)

Coop G. 2017a. Your ancestors lived all over the world. The Coop Lab Blog, November 28. https://gcbias.org/2017/11/28/your-ancestors-lived-all-over-the-world/

Coop G. 2017b. Where did your genetic ancestors come from? The Coop Lab Blog, December 19. https://gcbias.org/2017/12/19/1628/

Raff J. 2018. What do Elizabeth Warren's DNA test results actually mean? Forbes, October 15. https://www.forbes.com/sites/jenniferraff/2018/10/15/what-do-elizabeth-warrens-dna-test-results-actually-mean/

Estes N. 2018. Native American sovereignty is under attack. Here's how Elizabeth Warren's DNA test hurt our struggle. The Intercept, October 19. https://theintercept.com/2018/10/19/elizabeth-warren-dna-native-americans/

Gupta P. 2018. 'Our vote matters very little': Kim TallBear on Elizabeth Warren's attempt to claim Native American heritage. The Slot/Jezebel, October 16. https://theslot.jezebel.com/our-vote-matters-very-little-kim-tallbear-on-elizabeth-1829783321

Harmon A. 2018. Why white supremacists are chugging milk (and why geneticists are alarmed). New York Times, October 17. https://www.nytimes.com/2018/10/17/us/white-supremacists-science-dna.html

Donovan J, Pasquetto I, Pierre J. 2018. Cracking open the black box of genetic ancestry testing. Proceedings of the 51st Hawaii International Conference on System Sciences. pp 1731-1740.

February 26 The Science of Sex and Gender Differences

Required Readings (~105 pp total):

** indicates readings divided among students*

Keller EF. 1995. Gender and science: origin, history, and politics. Osiris 10:26-38.

Fausto-Sterling A. 2000. That sexe which prevaileth. Sexing the Body: Gender Politics and the Construction of Sexuality. New York: Perseus Books. p 30-44.

Markowitz S. 2017. Pelvic politics: sexual dimorphism and racial difference. In: Cipolla C, Gurta K, Rubin, D, Willey A, editors. Queer Feminist Science Studies: A Reader. Seattle: University of Washington Press. pp 43-55.

Schuller K. 2018. The Biopolitics of Feeling: Race, Sex, and Science in the Nineteenth Century. Durham: Duke University Press. pp 1-34.

*Schiebinger, L. 1993a. The private lives of plants. Nature's Body: Gender in the Making of Modern Science. New Brunswick: Rutgers University Press. pp 11-39.

*Schiebinger, L. 1993b. Why mammals are called mammals. Nature's Body: Gender in the Making of Modern Science. New Brunswick: Rutgers University Press. pp 40-74.

*Richardson S. 2017. Sexing the X: how the X became the "female chromosome". In: Cipolla C, Gurta K, Rubin, D, Willey A, editors. Queer Feminist Science Studies: A Reader. Seattle: University of Washington Press. pp 30-42.

*Martin, E. 1991. The egg and the sperm: how science has constructed a romance based on stereotypical male-female roles. Signs 3:485-501.

Ainsworth C. 2015. Sex redefined. Nature 518:288-291.

Montañez A. 2017. Beyond XX and XY. Scientific American 317:50-51. ***(Use two-page view!)***

Denworth L. 2017. Is there a "female" brain? Scientific American 317:38-43.

Fine C, Elgar MA. 2017. Promiscuous men, chaste women, and other gender myths. Scientific American 317:32-37.

Optional:

Fuentes A. 2012. Myths about Sex. Race, Monogamy, and Other Lies They Told You. Berkeley: University of California Press. pp 156-205.

March 5 Transgender and Transracial Identities

Required Readings (~108 pp total):

** indicates readings divided among students*

*Winter S. 2011. Transgender science: how might it shape the way we think about transgender rights? Hong Kong Law Journal 41:139-153.

*Geller P. 2019. The fallacy of the transgender skeleton. In: Buikstra J, editor. Bioarchaeologists Speak Out: Deep Time Perspectives on Contemporary Issues. pp 231-242.

Brubaker R. 2016a. The Dolezal affair: race, gender, and the micropolitics of identity. Ethnic and Racial Studies 39:414-448.

Brubaker R. 2016b. Trans: Gender and Race in an Age of Unsettled Identities. Princeton: Princeton University Press. pp 131-151.

Tuvel R. 2017. In defense of transracialism. Hypatia 32:263-278.

Brubaker R. 2017. The uproar over 'transracialism'. The New York Times, May 18.

Jaschik S. 2015. Fake Cherokee? Inside Higher Ed, July 6.

Barker J, et al. 2015. Open letter from Indigenous women scholars regarding discussions of Andrea Smith. Indian Country Today, July 7.

Blake J. 2018. The blurring of racial lines won't save America: why 'racial fluidity' is a con. CNN, March 9.

Chu AL. 2018. On liking women. n+1 Magazine, issue 30. nplusonemag.com/on-liking-women/

March 12 Intersectional Approaches in Archaeology and Bioanthropology

Project Proposal Due

Required Readings (144 pp total):

Conkey MW. 2005. Dwelling at the margins, action at the intersection? Feminist and Indigenous archaeologies. Archaeologies 1:9-59.

Atalay S. 2006. Indigenous archaeology as decolonizing practice. American Indian Quarterly 30:280-310.

Watkins RJ. In press. An alter(ed)native perspective on historical bioarchaeology. Historical Archaeology 53(4).

Geller PL. 2017. Brave old world. The Bioarchaeology of Socio-Sexual Lives: Queering Common Sense about Sex, Gender, and Sexuality. Springer. pp 201-206, 209-222.

Blackmore C. 2011. How to queer the past without sex: queer theory, feminisms, and the archaeology of identity. Archaeologies 7:75-96.

Bolnick DA, Smith RWA, Fuentes A, editors. 2019. Vital topics forum: how academic diversity is transforming scientific knowledge in biological anthropology. American Anthropologist.

Optional:

Agarwal SC. 2012. The past of sex, gender, and health: bioarchaeology of the aging skeleton. American Anthropologist 114:322-335.

Hollimon SE. 2006. The archaeology of nonbinary genders in Native North American societies. In: Nelson SE, editor. Handbook of Gender in Archaeology. Oxford: AltaMira Press. pp 435-450.

Martin DL, Harrod RP, Fields M. 2010. Beaten down and worked to the bone: bioarchaeological investigations of women and violence in the ancient Southwest. Landscapes of Violence 1(1): article 3.

March 19 Spring Break

March 26 Crime, Forensics, and Genotype/Phenotype

Required Readings (90 pp total, plus podcast):

Byers SN. 2005. Introduction to Forensic Anthropology, Second Edition. Boston: Pearson. pp. 10-11, 158-179.

Sauer NJ. 1992. Forensic anthropology and the concept of race: if races don't exist, why are forensic anthropologists so good at identifying them? Social Science and Medicine 34:107-111.

Goodman AH. 1997. Bred in the bone? The Sciences March/April: 20-25.

Williams FL, Belcher RL, Armelagos GJ. 2005. Forensic misclassification of ancient Nubian

crania: implications for assumptions about human variation. Current Anthropology 46:340-346.

Smay DB, Armelagos GJ. 2000. Galileo wept: a critical assessment of the use of race in forensic anthropology. Transforming Anthropology 9:19-29.

Bearman M. 2016. Between male and female. Sapiens, June 24.

Von Wurmb-Schwark N, Bosinski H, Ritz-Timme S. 2007. What do the X and Y chromosomes tell us about sex and gender in forensic case analysis? Journal of Forensic and Legal Medicine 14:27-30.

Oubré A. 2014. The Extreme Warrior gene: a reality check. https://scientiasalon.wordpress.com/2014/07/31/the-extreme-warrior-gene-a-reality-check/

Horgan J. 2011. Code rage: The "warrior gene" makes me mad! (Whether I have it or not). Scientific American blog. https://blogs.scientificamerican.com/cross-check/code-rage-the-warrior-gene-makes-me-mad-whether-i-have-it-or-not/

Kayser M, Schneider PM. 2009. DNA-based prediction of human externally visible characteristics in forensics: motivations, scientific challenges, and ethical considerations. Forensic Science International: Genetics 3: 154-161.

Rosen M. 2015. Can DNA predict a face? Science News, December 1.

Murphy H. 2015. I've just seen a (DNA-generated) face. The New York Times, February 23.

The Current. 2015. DNA phenotyping helps police fight crime but may be abusive. CBC Radio, March 4. (listen online at http://www.cbc.ca/radio/thecurrent/the-current-for-march-4-2015-1.2981015/dna-phenotyping-helps-police-fight-crime-but-may-be-abusive-1.2981060)

Optional:

Beaver KM, Wright JP, Boutwell BB, Barnes JC, DeLisi M, Vaughn MG. 2013. Exploring the association between the 2-repeat allele of the MAOA gene promoter polymorphism and psychopathic personality traits, arrests, incarceration, and lifetime antisocial behavior. Personality and Individual Differences 54:164-168.

April 2 **Intelligence and IQ Differences**

Required Readings (100-105 pp total)

Alland A. 2002. Race in Mind: Race, IQ, and Other Racisms. New York: Palgrave MacMillan. pp 79-103, 139-157.

Cohen MN. 2002. An anthropologist looks at "race" and IQ testing. In: Fish JM, editor. Race and Intelligence: Separating Science from Myth. Mahwah, NJ: Lawrence Erlbaum Associates. pp 201-224.

Rushton JP. 2000. Race, Evolution, and Behavior: A Life History Perspective. Second Special Abridged Edition. Port Huron, MI: Charles Darwin Research Institute. pp. 13-26, 47-58, 73-89.

Lieberman L. 2001. How "Caucasoids" got such big crania and why they shrank: from Morton to Rushton. Current Anthropology 42:69-95. (comments are NOT required reading)

Wicherts JM, Borsboom D, Dolan CV. 2010. Why national IQs do not support evolutionary theories of intelligence. Personality and Individual Differences 48:91-96.

Lynn R. 2010. Consistency of race differences in intelligence over millenia: a comment on Wicherts, Borsboom, and Dolan. Personality and Individual Differences 48:100-101.

Kenny C. 2012. Dumb and dumber. Foreign Policy, April 30.

Ripley A, Mustafa N, van Dyk D, Plon U. 2005. Who says a woman can't be Einstein? Time 165:50-61.

Joel D, et al. 2015. Sex beyond the genitalia: the human brain mosaic. Proceedings of the National Academy of the Sciences USA 112:15468-15473.

Glezerman M. 2016. Yes, there is a female and a male brain: morphology versus functionality. Proceedings of the National Academy of the Sciences USA 113:E1971.

Joel D, Hänggi J, Pool J. 2016. Why differences between brains of females and brains of males do

not "add up" to create two types of brains. Proceedings of the National Academy of the Sciences USA 113:E1972.

April 9 **Health Inequities, Discrimination, and Embodiment**
Guest speaker: Alan Goodman (Hampshire College)

Required Readings (75 pp total):

Satel S. 2002. I am a racially profiling doctor. New York Times Magazine, May 5.

Goodman A. 2000. Why genes don't count (for racial differences in health). American Journal of Public Health 90:1699-1702.

David RJ, Collins Jr JW. 1997. Differing birth weight among infants of U.S.-born blacks, African-born blacks, and U.S.-born whites. New England Journal of Medicine 337:1209-1214.

Centerwall BS. 1995. Race, socioeconomic status, and domestic homicide. JAMA 273:1755-1758.

Gravlee CC. 2009. How race becomes biology: embodiment of social inequality. American Journal of Physical Anthropology 139:47-57.

Gravlee CC, Non AL, Mulligan CJ. 2009. Genetic ancestry, social classification, and racial inequalities in blood pressure in southeastern Puerto Rico. PLoS ONE 4(9): e6821.

Sullivan S. 2013. Inheriting racist disparities in health: epigenetics and the transgenerational effects of white racism. Critical Philosophy of Race 1: 190-218.

Kahn J. 2007. Race in a bottle. Scientific American 297:40-45.

Williams DR, Wyatt R. 2015. Racial bias in health care and health: challenges and opportunities. Journal of the American Medical Association 314:555-556.

Brooks KC. 2015. A silent curriculum. Journal of the American Medical Association 313:1909-1910.

Bolnick DA. 2016. Combating racial health disparities through medical education: the need for anthropological and genetic perspectives in medical training. Human Biology 87:361-371.

Optional:

Hoberman J. 2005. The primitive pelvis: the role of racial folklore in obstetrics and gynecology during the twentieth century. In: Forth CE, Crozier I, editors. Body Parts: Critical Explorations in Corporeality. Lanham: Lexington Books. pp.85-103.

April 16 **Sex, Race, and Biomedicine**

Required Readings (317 pp total):

Skloot R. 2010. The Immortal Life of Henrietta Lacks. Crown Publishing Group.

Hudson KL, Collins FS. 2013. Family matters. Nature 500: 141-142.

April 23 **Athletics and Biology**
Position Statement #2 Due

Required Readings (~78 pp total)

Hoberman J. 1997. Darwin's Athletes: How Sport Has Damaged Black America and Preserved the Myth of Race. Boston: Houghton Mifflin. pp 187-207.

Rada JA, Wulfemeyer KT. 2005. Color coded: racial descriptors in television coverage of intercollegiate sports. Journal of Broadcasting and Electronic Media 49:65-85.

Andersen JL, Schjerling P, Saltin B. 2000. Muscle, genes, and athletic performance. Scientific American 283:48-55.

Entine J. 2000. The story behind the amazing success of Black athletes. Run-Down, June 12/14.

Cooky C, Dycus R, Dworkin SL. 2013. "What makes a woman a woman?" versus "our first lady of sport": a comparative analysis of the United States and the South African media coverage of Caster Semenya. Journal of Sport and Social Issues 37:31-56.

April 30 **Student Presentations**
Final Project Due

2020-225 COMM 4995 Add Special Topic: Science Communication

UCONN | COLLEGE OF LIBERAL ARTS AND SCIENCES

COMMITTEE ON CURRICULA AND COURSES

Proposal to offer a new or continuing 'Special Topics' course (xx95; formerly 298)

Last revised: September 24, 2013

Understanding the unique character of special topics courses: 'Special Topics', in CLAS curricular usage, has a narrow definition: it refers to the content of a course offering approved on a provisional basis for developmental purposes only. Compare this definition with that of variable topics (xx98) courses.

It is proposed by a department and approved conditionally by the college only with a view toward its eventual adoption as a permanent departmental offering. For this reason, such conditional approval may be renewed for not more than three semesters, after which the course must be either brought forward for permanent adoption, or abandoned. The factotum designation xx95 is to be assigned to all such developmental offerings as proposed.

Note: Such courses are normally reviewed by the Chair of CLAS CC&C, and do not require deliberation by the Committee unless questions arise. Courses must be approved prior to being offered, but are not subject to catalog deadlines since they do not appear in the catalog. Special Topics courses are to be employed by regular faculty members to pilot test a new course, with the idea that it is likely to be proposed as a regular course in the future.

Submit one copy of this form by e-mail to the Chair of CLAS after all departmental approvals have been obtained, with the following deadlines:

(1) for Fall listings, by the first Monday in March (2) for Spring listings, by the first Monday in November

1. Date of this proposal: July 24, 2020
2. Semester and year this xx95 course will be offered: Fall, 2020
3. Department: Communication
4. Course number and title proposed: 4995: Science Communication
5. Number of Credits: 3

6. Instructor: Steinke, Jocelyn
7. Instructor's position: Associate Professor
(**Note**: in the rare case where the instructor is not a regular member of the department's faculty, please attach a statement listing the instructor's qualifications for teaching the course and any relevant experience).
8. Has this topic been offered before? No If yes, when?
9. Is this a (X) 1st-time, ( ) 2nd-time, ( ) 3rd-time request to offer this topic?
10. Short description: The role of communication and media in shaping science and technology in society. Topics include theories and debates in the field, media coverage of science, activism and science campaigns, and using new and social media to communicate science issues.
11. Please attach a sample/draft syllabus to first-time proposals. Attached (COMM 3430 will be the permanent course number.)
12. Comments, if comment is called for: We're looking to offer this course as COMM 4995 due to the delay in processing COMM 3430, which has been approved by CLAS CCC but we presume is being delayed by its W variant.
13. Dates approved by:
Department Curriculum Committee: 3/2020
Department Faculty: 3/2020

14. Name, Phone Number, and e-mail address of principal contact person: Stephen Stifano – 401.323.4652

Supporting Documents

If required, attach a syllabus and/or instructor CV to your submission email in separate documents. This version of the CV will be made public. Do not include any private information.

COMM 3430/W. Science Communication

Three credits.
Prerequisite: COMM 2300 (formerly 3300) or 2500 (formerly 3100);
(W: ENG 1007 or 1010 or 1011 or 2011)

The role of communication and media in shaping science and technology in society. Topics include theories and debates in the field, media coverage of science, activism and science campaigns, and using new and social media to communicate science issues.

1. Reasons for adding this course: Currently, students do not have a science or environmental communication course to take which examines how the media communicates these topics. This course will allow students who wish to study science and environmental topics from a societal and communication point-of-view to research in this area.

2. Academic merit: This course will take both a theoretical and applied approach to study science communication. Students will study theoretical models and approaches utilized in the field, as well as examine applied topics using real-world examples.

COMM 3430
Science Communication
[TERM]
[LOCATION]

Instructor:
Email:
Office:
Hours:

Course Description and Objectives:
This course is designed to examine the role of communication and the media in shaping and communicating the knowledge, uncertainty, and debates of science, technology, and the environment. Specifically, the course will examine the interaction of science and technology with the media and society. Utilizing both theory and applied practice, we will examine the media's role in influencing public understanding of science, representations of science, and strategic uses of media to communicate messages about science. Special emphasis will be placed on understanding how the media has shaped current scientific debates, such as climate change, fracking, food biotechnology, and childhood vaccines. At the end of this course, you will:

- Understand the interplay between science, engineering, technology, and society
- Identify and describe theories and concepts used to explain public perceptions of attitudes toward science, engineering, and the environment
- Assess how media portray opinions of experts, advocates, and non-experts
- Have the ability to find, discuss, and evaluate expert sources of factual information
- Assess competing media claims and narratives
- Think strategically and critically to develop evidence-based arguments
- Apply relevant theories and concepts to strategically communicate scientific information and debates

Required Text:
There is no required textbook for this course. This does not mean there are no readings for course. A reading list is provided at the end of this syllabus. Readings are drawn from academic journals, book chapters, and media examples.

- Access to HuskyCT for these course readings/references
- Access to UConn e-mail for communicating with the instructor

Communicating with the instructor:
Class announcements will be posted on HuskyCT. Please check frequently. You are responsible for all information posted there. Please ask if you are confused about any course content, policies, or assignments. I am always happy to meet with students during office hours, but if those times do

not work for you may request an appointment at a different time. Email is by far the easiest way to get a hold of the instructor.

Grading:
Grades are not given; they are **earned**. This is an upper level course and I expect you to perform and produce work of the highest quality. Keep up with the material and see me whenever you have any questions.

Grades will be posted on HuskyCT as soon as they become available. Come to office hours or set up an appointment to discuss questions about grades. If you do not question it, a grade becomes permanent **one week after it has been posted to HuskyCT**. Privacy laws prohibit the discussion of grades via email.

Grades are based on the percentage of possible points you earn on the following scale, rounded to the *nearest* whole percentage point based on standard rounding rules: .5 and above rounds up, while decimal points below .5 do not. E.g., 81.5 becomes 82, but 81.2 remains at 81.

A	91.50 – 100%	**C**	71.50 – 77.49%
A-	89.50 – 91.49%	**C-**	69.50 – 71.49%
B+	87.50 – 89.49%	**D+**	67.50 – 69.49%
B	81.50 – 87.49%	**D**	61.50 – 67.49%
B-	79.50 – 81.49%	**D-**	59.50 – 61.49%
C+	77.50 – 79.49%	**F**	0.00 – 59.49%

Exam 1 Exam 2 Final Exam	20 points (20%) 20 points (20%) 25 points (25%)
Media Analysis Portfolio	30 points (3 x 5 points, 1 x 15 points) (30%)
Class Discussion/Participation	5 points (semester) (5%)
TOTAL	**100 points**

Course Assignments:

Readings
Readings are to be completed **prior to class**. Students are expected to come prepared to discuss the topic(s) of the day.

Exams
There will be three exams; all exams will be given during scheduled class times. The exams will cover both the required readings from the textbook along with any materials covered and discussed during class. The exams will be primarily multiple-choice and true/false based with the possibility of some short answer or essays questions.

Exams must be taken during the scheduled exam time. All requests for a makeup due to athletic participation, job interviews, special religious observances, or other foreseeable purposes must be made **more than 48 hours prior** to the exam and require documentation. A last minute makeup exam can only be taken with proof of a valid medical excuse or extenuating circumstance.

Media Analysis Portfolio
This is a semester-long project in which you will choose a science topic of interest to you and identify and analyze 10 media "texts" that focus on that topic. You will create a portfolio blog or tumblr on which you will compile 1-paragraph analyses of each media example. Finally, you will write a synthetic essay (in the form of an approximately 2000-word blog post) due at the end of the semester that provides a focused, evidenced-based argument about the overall quality of mediated communication about your topic. The project is divided into three incremental steps, plus the final portfolio and essay. Detailed instructions for each step will be provided later in the semester.

Step 1 (5%): Select a topic and set-up your blog, tumblr, etc. (Due by Week 4)
Step 2 (5%): Research and write a 2-page backgrounder on your topic (Due Week 7)
Step 3 (5%): Post 1-paragraph analysis of first 10 media examples on your blog (Due Week 10)
Final (15%): Finalize blog and submit final blog post related to your topic (Due Week 14)

COURSE TOPIC & READING LIST:

Part 1: Public Understanding, Overview, and Making Sense of Science

Week 1: Overview, Concepts, and Themes

- (Mann, 2014) - How to talk about Climate Change so that People Will Listen [The Atlantic]

Week 2: Science Communication Models & Debates

- (Achenback, 2015) – Why do Many Reasonable People Doubt Science? [National Geographic]
- Scheufele (2014) – Science Communication as Political Communication. [Proceedings of the National Academy of Sciences]
- Moser, S. C., & Dilling, L. (2011). Communicating climate change: closing the science-action gap. *The oxford handbook of climate change and society. Oxford University Press, Oxford*, 161-174. [PDF]

Week 3: Framing of Science Concepts and Issues

- Nisbet, M.C. (2014). Framing, the Media and Risk Communication in Policy Debates. In H. Cho, T. Reimer, and & K. McComas (eds), Sage Handbook of Risk Communication. Newbury Park, CA: Sage Publications (pp. 216-227).

- Nisbet, M.C. (2009). Communicating Climate Change: Why Frames Matter to Public Engagement. Environment, 51 (2), 514-518. [HTML] [PDF]
- Schuldt, Konrath, & Schwarz (2011). Global Warming or Climate Change? Whether the Planet is Warming Depends on Question Wording. [Public Opinion Quarterly]

Week 4: Communicating Risk and Affect

- Risk: Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2004). Risk as analysis and risk as feelings: Some thoughts about affect, reason, risk, and rationality. *Risk analysis*, *24*(2), 311-322. [PDF]
- Pidgeon, N., & Fischhoff, B. (2011). The role of social and decision sciences in communicating uncertain climate risks. *Nature Climate Change*, *1*(1), 35-41. [HTML]
- Trust: Brossard, D., & Nisbet, M. C. (2007). Deference to scientific authority among a low information public: Understanding US opinion on agricultural biotechnology. *International Journal of Public Opinion Research*, *19*(1), 24-52. [PDF]

Week 5: The Role of Ideology & Culture in Science Issues

- Mooney, C., & Nisbet, M. C. (2005). *Undoing Darwin.* Columbia Journalism Review, 44(3), 30-39. [PDF]
- Labov, J. B., & Pope, B. K. (2008). Understanding our audiences: the design and evolution of science, evolution, and creationism. *CBE-Life Sciences Education*, *7*(1), 20-24. [PDF]
- Hoffman, A. J. (2012). Climate science as culture war. *Stanford Social Innovation Review*, *10*(4), 30-37. [HTML]

Week 6 & 7: Politics in Science

- Guber, D. L. (2012). A cooling climate for change? Party polarization and the politics of global warming. *American Behavioral Scientist.* [PDF]
- Kahan, D. (2012). Why we are poles apart on climate change. *Nature*,*488*(7411), 255-255. [PDF]
- Konnikova (2014). I Don't Want to be Right. [The New Yorker]

Part 2: Science Across the Media Spectrum

Week 8: Science and Environmental Media

- Brumfiel, G. (2009). Science journalism: Supplanting the old media?. *Nature*,*458*(7236), 274-277. [HTML]
- (Bagley, 2013). About a Dozen Environment Reporters Left at Top 5 U.S. Papers. [Inside

Climate News]

- Brossard, D., & Scheufele, D. A. (2013). Science, new media, and the public. *Science*, *339*(6115), 40-41. [PDF]
- Bell & Turney, 2014 Popular Science Books [Will Provide Reading Later]

Week 9: Science and Environmental Journalism

- Nisbet, M. C., & Fahy, D. (2015). The need for knowledge-based journalism in politicized science debates. *The ANNALS of the American Academy of Political and Social Science*, *658*(1), 223-234. [PDF]
- Shannahan et al 2015 [Will provide copy]
- Hmielowski, J. D., Feldman, L., Myers, T. A., Leiserowitz, A., & Maibach, E. (2013). An attack on science? Media use, trust in scientists, and perceptions of global warming. *Public Understanding of Science*, 0963662513480091. [PDF]
- Placky, B. W., Maibach, E., Witte, J., Ward, B., Seitter, K., Gardiner, N., ... & Cullen, H. (2015). Climate Matters: A comprehensive educational resource program for broadcast meteorologists. *Bulletin of the American Meteorological Society*, (2015). [HTML]

Week 10: Activism, PR, & Campaigns

- Nisbet, M. C. Environmental Advocacy in the Obama Years. *N. Vig & M. Kraft (Eds), Environmental Policy: New Directions for the Twenty-First Century, 9th Edition*. [PDF]
- Ahern, L., Bortree, D. S., & Smith, A. N. (2013). Key trends in environmental advertising across 30 years in National Geographic magazine. *Public Understanding of Science*, *22*(4), 479-494. [PDF]
- (Klein, 2015). Climate Change is a Crisis We Can Only Solve Together. [HTML]
- Nisbet, M. C., & Kotcher, J. E. (2009). A two-step flow of influence? Opinion-leader campaigns on climate change. *Science Communication*. [PDF]

Week 11: Using Narrative and Visuals to Communicate Data & Science

- O'Neill, S., & Nicholson-Cole, S. (2009). "Fear Won't Do It" Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. *Science Communication*, *30*(3), 355-379. [PDF]
- Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences*, *111*(Supplement 4), 13614-13620. [HTML]

Week 12: New, Digital, and Emerging Media in Science Communication

- Gibson, T. A., Craig, R. T., Harper, A. C., & Alpert, J. M. (2015). Covering global warming in dubious times: Environmental reporters in the new media ecosystem. *Journalism*, 1464884914564845. [PDF]
- http://www.popsci.com/science/article/2013-09/why-were-shutting-our-comments
- http://www.fastcocreate.com/3034276/re-branding-nasa-for-a-new-space-age
- Brossard, D. (2013). New media landscapes and the science information consumer. *Proceedings of the National Academy of Sciences*,*110*(Supplement 3), 14096-14101. [HTML]

Week 13: Sci-Con: Science and Pop Culture

- http://www.vox.com/2015/4/16/8412427/dr-oz-health-claims
- Sakellari, M. (2015). Cinematic climate change, a promising perspective on climate change communication. *Public Understanding of Science*, *24*(7), 827-841. [PDF]
- Feldman, L. (2013). Cloudy with a Chance of Heat Balls: The Portrayal of Global Warming on The Daily Show and The Colbert Report. *International Journal of Communication*, *7*, 22. [PDF]
- http://www.vox.com/2015/4/13/8385295/science-reporting-ethics

Week 14: Moving Forward in the Field

- Fahy, D., & Nisbet, M. C. (2011). The science journalist online: Shifting roles and emerging practices. *Journalism*, *12*(7), 778-793. [PDF]
- http://www.simonowens.net/how-reddit-created-the-worlds-largest-dialogue-between-scientists-and-the-general-public
- Baron, N. (2010). *Escape from the ivory tower: a guide to making your science matter*. Island Press. [CH. 8 – PDF]

*****This course schedule is subject to change. Any changes to the schedule will be announced in class and updated on HuskyCT.

General Course Policies:

Attendance

Attendance is not optional and classes should not be missed except in the case of an emergency. In addition to course lecture material, announcements and information about how to complete assignments will be communicated during class. If you are not present to learn the material or how to accomplish a particular assignment, you are not likely to perform well on the assignment

or exams. **While attendance is not recorded, your presence and participation will be considered as part of your grade**. If you do miss a class, please coordinate with another student to obtain missed notes and assignment information.

Class Participation
You are expected to come to each class meeting having done the required readings and ready to participate in discussions about that week's topic. Never hesitate to voice your beliefs or ask questions about the readings. No observation or question is too trivial.

Late Work
Any work that is turned in after a designated deadline will be considered late. If an assignment is turned in within 48 hours of the deadline it will receive half-credit of the graded value. Any assignment turned in after 48 hours of a deadline will not be graded and will receive a 0. There are no exceptions to this rule, unless a student has made arrangements with the professor before the assignment was due, or in the case of a documented emergency.

Classroom Civility
In this course, it is important that people and ideas are treated with respect, and that class time is used productively. Please avoid behaviors that make it difficult to accomplish our mutual objectives (e.g., side conversations, showing disrespect to classmates, coming to class late or leaving early, etc.). In addition, please refrain from using cell phones during class. Understand that I will impose appropriate penalties if such behaviors are flagrantly or routinely exhibited. Immature behavior will not be tolerated, period.

ACADEMIC MISCONDUCT:

Academic misconduct is dishonest or unethical academic behavior that includes, but is not limited, to misrepresenting mastery in an academic area (e.g., cheating), failing to properly credit information, research or ideas to their rightful originators, or representing such information, research, or ideas as your own (e.g., plagiarism). Cheating or plagiarism may result in failing this course and/or removal from the university.

Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation. If there is evidence of any deliberate violation of academic integrity (e.g., cheating, plagiarism, or the like), including collaboration or sharing of course content, materials, etc., your instructor will pursue the most punitive response the university allows. Sometimes these standards are subtle; feel free to ask if you have questions or concerns.

See http://community.uconn.edu/the-student-code-appendix-a/ for more information on the University's student code as it pertains to Academic Integrity.

STUDENTS WITH DISABILITIES:

Accommodations for Disabilities: If you are a student with a disability, who requires reasonable accommodations, please see http://www.csd.uconn.edu/ for your responsibilities. Notify me and I will do my best to provide the necessary accommodations at your request.

OTHER RESOURCES:

CLAS Academic Services Center
860-486-2822
clasadvising.uconn.edu

Career Services
860-486-3013
career.uconn.edu

Counseling and Mental Health Services
860-486-4705 (after hours: 860-486-3427)
counseling.uconn.edu

Dean of Students Office
860-486-3426
dos.uconn.edu

UCONN | College of Liberal Arts and Sciences
Department of Communication

COMM 3430W
Science Communication

Instructor: **Office:**
Email: **Hours:**
[TERM]
[LOCATION]

Course Description and Objectives:
This course is designed to examine the role of communication and the media in shaping and communicating the knowledge, uncertainty, and debates of science, technology, and the environment. Specifically, the course will examine the interaction of science and technology with the media and society. Utilizing both theory and applied practice, we will examine the media's role in influencing public understanding of science, representations of science, and strategic uses of media to communicate messages about science. Special emphasis will be placed on understanding how the media has shaped current scientific debates, such as climate change, fracking, food biotechnology, and childhood vaccines. At the end of this course, you will:

- Understand the interplay between science, engineering, technology, and society
- Identify and describe theories and concepts used to explain public perceptions of attitudes toward science, engineering, and the environment
- Assess how media portray opinions of experts, advocates, and non-experts
- Have the ability to find, discuss, and evaluate expert sources of factual information
- Assess competing media claims and narratives
- Think strategically and critically to develop evidence-based arguments
- Apply relevant theories and concepts to strategically communicate scientific information and debates

This course satisfies the university's "W" – writing across the curriculum – requirement. For the writing aspect of the course, our work will focus on:

- Writing clearly and concisely for an academic audience
- Organization and flow

Required Text:
There is no required textbook for this course. This does not mean there are no readings for course. A reading list is provided at the end of this syllabus. Readings are drawn from academic journals, book chapters, and media examples.

- Access to HuskyCT for these course readings/references
- Access to UConn e-mail for communicating with the instructor

W Course Policies:
A "W" course is not just about completing a research paper. "W" courses will help you examine a specific topic area through writing, critical analysis, and deepening your understanding of how individuals use writing to help learn concepts. While a large focus of this course will be writing a scholarly communication paper, the tools and strategies gained from this practice will help you throughout your career and professional life.

In addition, an integral part of the writing process is revision and editing. Most of the writing you do for this course will be revised and edited, either by yourself, a peer, or the instructor. In accordance with "W" guidelines, a minimum of 15 pages will go through the revision process.

According to university-wide policies for W courses, you cannot pass this course unless you receive a passing grade for its writing components. (i.e. you must pass the final paper to pass the course)

Grading:
Grades are not given; they are **earned**. This is an upper level course and I expect you to perform and produce work of the highest quality. Keep up with the material and see me whenever you have any questions.

Grades will be posted on HuskyCT as soon as they become available. Come to office hours or set up an appointment to discuss questions about grades. If you do not question it, a grade becomes permanent **one week after it has been posted to HuskyCT**. Privacy laws prohibit the discussion of grades via email.

Grades are based on the percentage of possible points you earn on the following scale, rounded to the *nearest* whole percentage point based on standard rounding rules: .5 and above rounds up, while decimal points below .5 do not. E.g., 81.5 becomes 82, but 81.2 remains at 81.

A	91.50 – 100%	**C**	71.50 – 77.49%
A-	89.50 – 91.49%	**C-**	69.50 – 71.49%
B+	87.50 – 89.49%	**D+**	67.50 – 69.49%
B	81.50 – 87.49%	**D**	61.50 – 67.49%
B-	79.50 – 81.49%	**D-**	59.50 – 61.49%
C+	77.50 – 79.49%	**F**	0.00 – 59.49%

Exam 1 Exam 2	48 points (12%) 48 points (12%)
Paper Topic & Abstract	20 points (5%)
Paper Outline & Reference List	40 points (10%)
First Draft of Full Paper	60 points (15%)
Peer Review/Editing	24 points (6%)
Final Presentation	40 points (10%)
Final Paper	120 points (30%)
TOTAL	**400 points (100%)**

Course Assignments:

Readings
Readings are to be completed **prior to class**. Students are expected to come prepared to discuss the topic(s) of the day.

Exams
There will be two exams; all exams will be given during scheduled class times. The exams will cover both the required readings from the textbook along with any materials covered and discussed during class. The exams will be primarily multiple-choice and true/false based with the possibility of some short answer or essays questions.

Exams must be taken during the scheduled exam time. All requests for a makeup due to athletic participation, job interviews, special religious observances, or other foreseeable purposes must be made **more than 48 hours prior** to the exam and require documentation. A last minute makeup exam can only be taken with proof of a valid medical excuse or extenuating circumstance.

Research Paper
Your major writing assignment for COMM 3430W should address research literature on a single topic related to science communication. This will be done in a semester long build and revise method.

As per University Guidelines for W courses: "A student cannot pass a W course without earning a passing grade on its writing components."

You will choose one of the following writing prompts:

- 15-page Standard Academic Literature Review on science communication-related topic of interest
- 15-page Grant Proposal
- 15-page Standard Research Study Proposal

For the paper, you will choose a topic within science communication to research. Treat this like a professional paper, as this will be beneficial as a writing sample or future research/contribution to the field.

You'll need to reference 8-10 sources on a relevant issue of your choosing. The articles must be from academic books or journals. The latter can be found in the main library, or any number of online resources, and might include such titles as *Critical Studies in Mass Communication, Journalism Quarterly, Journal of Communication, Science Communication,* and *Environmental Communication.*

General education textbooks do *not* count as scholarly sources (because they are "edited," not subject to "peer review"), nor do periodicals (e.g., *New York Times*). These may be used, but they will not be counted towards your 8-10 required peer-reviewed sources.

You may review any science communication related topic, so long as (1) all references address the same topic, which should be narrowly defined, and (2) academic sources are relatively timely (i.e., published within the last decade or two). Think of your personal interests and course content when choosing a topic. Any weekly topic appearing on the syllabus would be appropriate for study, but feel free to address other dimensions of communication messages or effects as well. Once you've selected a topic area, consult the assigned readings closest to your topic for additional sources and information.

Overly broad topics (e.g., "How science is communicated to society") should be avoided. Be very specific with your focus (e.g. "Examining Perceived Credibility of Scientists Who Tweet"). Take care to delimit your topic to one medium or genre. Also, remember to focus on science-related issues. A review of "health communication" would not be appropriate for this course.

Assignment Descriptions
Each submission requires something specific to be considered a completed draft. All submissions should follow APA guidelines.

Step 1 (5%): *Paper Topic and Abstract* (Due by Week 2)
Step 2 (10%): *Paper Outline & Reference List* (Due Week 5)
Step 3 (15%): *First Draft of Full Paper* (Due Week 9)
Step 4 (6%): *Peer Review/Editing* (Week 11)
Final (30%): *Final Paper* (Due on Final Day)

Paper Topic and Abstract
This should be a one page abstract/proposal that outlines what topic you would like to do, what method you would like to use, and why this topic and method is appropriate for this assignment.

Paper Outline and Reference List
This submission should include a fully realized outline of the topic and argument you are presenting. In-text citations should be used where appropriate, and there should be a full APA References page included at the end. Claims should be made in full sentences, but backup information can be bullet points. A clear thesis should also be made early in the paper. Section headers should be appropriate to the type of writing.

First Draft of Full Paper
This submission should be a complete draft of the paper. Feedback will be given with careful attention to content and style. Be sure to include a cover letter that reports what you are most concerned with or are having trouble with so that I can focus my feedback on addressing your concerns.

Peer Review/Editing
Once you have received feedback from the instructor, you will then become an editor yourself on another student's draft. Before your paper undergoes peer review, you will have the opportunity to include my feedback into a newly revised draft, then get an additional opinion on how to edit and structure the ideas in your paper from another student in the class (on this new draft). Not only will this help improve your individual paper, but it will also expose you to the back-end of article production where most of the revision and heavy editing occurs.

Final Submission
This is the final draft of your paper and should be uploaded to HuskyCT by 5pm on the final exam date.

Writing will be done in stages with an emphasis on revision. Each submission is graded separately, and late work will not be accepted 48 hours past the due dates. If the submission is late within the 48 hours, then the assignment will be graded for half credit.

Writing assignments are to be turned in electronically, with a cover letter, to me **via the assignment setting in HuskyCT.** (If you are having problems with HuskyCT, email me the file directly so as to avoid any late penalties). In order to not be considered late, it must be received in my HuskyCT inbox by 5:00 p.m. by the specified due date.

When you submit your assignment you need to include a cover letter (the cover letter can either be a second, separate Word document or you can have it be the first page of your assignment). ***Each submission*** requires a cover letter. A template of how to word the cover letter for your initial draft submission and for your revised submissions are below.

Submit your paper ***as an attachment*** within the assignment tab. Your paper must be submitted in one of the following formats: a Word document (.doc or .docx), or a PDF. Simply cutting and pasting your paper into the submission box in HuskyCT will not keep your formatting (which is one of the things you are getting graded on).

Template of Cover Letter **for a Draft**:

Dear _____
I think the strongest parts of this draft are _____
What I struggled the most with was _____
My top two priorities for revising this are _____
Other things I know I need to work on still include _____
Questions I have for you at this stage are _____
Sincerely, [your name]

I will use this information in your cover letter to help me better review and critique your assignment. For example, if you know your article summaries are not as strong as your analysis of the articles' conclusions, then I will know to give you more directed feedback about analyzing articles for a literature review.

When you *resubmit* your paper, you will write **another** cover letter (in other words, every submission requires a new cover letter). (template follows):

Dear _____
In the first draft I _____
Given the feedback I received on that draft, I decided to _____because _____
For this final draft I concentrated most of my efforts on _____ because _____
What I struggled with most was _____.
If given more time, I would work on _____
I think that the strongest parts of this final draft are _____
Sincerely, [your name]

COURSE TOPIC & READING LIST:

Part 1: Public Understanding, Overview, and Making Sense of Science

Week 1: Overview, Concepts, and Themes

- (Mann, 2014) - How to talk about Climate Change so that People Will Listen [The Atlantic]

Week 2: Science Communication Models & Debates

- (Achenback, 2015) – Why do Many Reasonable People Doubt Science? [National Geographic]
- Scheufele (2014) – Science Communication as Political Communication. [Proceedings of the National Academy of Sciences]
- Moser, S. C., & Dilling, L. (2011). Communicating climate change: closing the science-action gap. *The oxford handbook of climate change and society. Oxford University Press, Oxford*, 161-174. [PDF]

Week 3: Framing of Science Concepts and Issues

- Nisbet, M.C. (2014). Framing, the Media and Risk Communication in Policy Debates. In H. Cho, T. Reimer, and & K. McComas (eds), Sage Handbook of Risk Communication. Newbury Park, CA: Sage Publications (pp. 216-227).
- Nisbet, M.C. (2009). Communicating Climate Change: Why Frames Matter to Public Engagement. Environment, 51 (2), 514-518. [HTML] [PDF]
- Schuldt, Konrath, & Schwarz (2011). Global Warming or Climate Change? Whether the Planet is Warming Depends on Question Wording. [Public Opinion Quarterly]

Week 4: Communicating Risk and Affect

- Risk: Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2004). Risk as analysis and risk as feelings: Some thoughts about affect, reason, risk, and rationality. *Risk analysis*, *24*(2), 311-322. [PDF]
- Pidgeon, N., & Fischhoff, B. (2011). The role of social and decision sciences in communicating uncertain climate risks. *Nature Climate Change*, *1*(1), 35-41. [HTML]
- Trust: Brossard, D., & Nisbet, M. C. (2007). Deference to scientific authority among a low information public: Understanding US opinion on agricultural biotechnology. *International Journal of Public Opinion Research*, *19*(1), 24-52. [PDF]

Week 5: The Role of Ideology & Culture in Science Issues

- Mooney, C., & Nisbet, M. C. (2005). *Undoing Darwin.* Columbia Journalism Review, 44(3), 30-39. [PDF]
- Labov, J. B., & Pope, B. K. (2008). Understanding our audiences: the design and evolution of science, evolution, and creationism. *CBE-Life Sciences Education*, *7*(1), 20-24. [PDF]
- Hoffman, A. J. (2012). Climate science as culture war. *Stanford Social Innovation Review*, *10*(4),

30-37. [HTML]

Week 6 & 7: Politics in Science

- Guber, D. L. (2012). A cooling climate for change? Party polarization and the politics of global warming. *American Behavioral Scientist.* [PDF]
- Kahan, D. (2012). Why we are poles apart on climate change. *Nature*,*488*(7411), 255-255. [PDF]
- Konnikova (2014). I Don't Want to be Right. [The New Yorker]

Part 2: Science Across the Media Spectrum

Week 8: Science and Environmental Media

- Brumfiel, G. (2009). Science journalism: Supplanting the old media?. *Nature*,*458*(7236), 274-277. [HTML]
- (Bagley, 2013). About a Dozen Environment Reporters Left at Top 5 U.S. Papers. [Inside Climate News]
- Brossard, D., & Scheufele, D. A. (2013). Science, new media, and the public. *Science*, *339*(6115), 40-41. [PDF]
- Bell & Turney, 2014 Popular Science Books [Will Provide Reading Later]

Week 9: Science and Environmental Journalism

- Nisbet, M. C., & Fahy, D. (2015). The need for knowledge-based journalism in politicized science debates. *The ANNALS of the American Academy of Political and Social Science*, *658*(1), 223-234. [PDF]
- Shannahan et al 2015 [Will provide copy]
- Hmielowski, J. D., Feldman, L., Myers, T. A., Leiserowitz, A., & Maibach, E. (2013). An attack on science? Media use, trust in scientists, and perceptions of global warming. *Public Understanding of Science*, 0963662513480091. [PDF]
- Placky, B. W., Maibach, E., Witte, J., Ward, B., Seitter, K., Gardiner, N., ... & Cullen, H. (2015). Climate Matters: A comprehensive educational resource program for broadcast meteorologists. *Bulletin of the American Meteorological Society*, (2015). [HTML]

Week 10: Activism, PR, & Campaigns

- Nisbet, M. C. Environmental Advocacy in the Obama Years. *N. Vig & M. Kraft (Eds), Environmental Policy: New Directions for the Twenty-First Century, 9th Edition*. [PDF]
- Ahern, L., Bortree, D. S., & Smith, A. N. (2013). Key trends in environmental advertising across 30 years in National Geographic magazine. *Public Understanding of Science*, *22*(4), 479-494. [PDF]
- (Klein, 2015). Climate Change is a Crisis We Can Only Solve Together. [HTML]

- Nisbet, M. C., & Kotcher, J. E. (2009). A two-step flow of influence? Opinion-leader campaigns on climate change. *Science Communication*. [PDF]

Week 11: Using Narrative and Visuals to Communicate Data & Science

- O'Neill, S., & Nicholson-Cole, S. (2009). "Fear Won't Do It" Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. *Science Communication*, *30*(3), 355-379. [PDF]
- Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences*, *111*(Supplement 4), 13614-13620. [HTML]

Week 12: New, Digital, and Emerging Media in Science Communication

- Gibson, T. A., Craig, R. T., Harper, A. C., & Alpert, J. M. (2015). Covering global warming in dubious times: Environmental reporters in the new media ecosystem. *Journalism*, 1464884914564845. [PDF]
- http://www.popsci.com/science/article/2013-09/why-were-shutting-our-comments
- http://www.fastcocreate.com/3034276/re-branding-nasa-for-a-new-space-age
- Brossard, D. (2013). New media landscapes and the science information consumer. *Proceedings of the National Academy of Sciences*,*110*(Supplement 3), 14096-14101. [HTML]

Week 13: Sci-Con: Science and Pop Culture

- http://www.vox.com/2015/4/16/8412427/dr-oz-health-claims
- Sakellari, M. (2015). Cinematic climate change, a promising perspective on climate change communication. *Public Understanding of Science*, *24*(7), 827-841. [PDF]
- Feldman, L. (2013). Cloudy with a Chance of Heat Balls: The Portrayal of Global Warming on The Daily Show and The Colbert Report. *International Journal of Communication*, *7*, 22. [PDF]
- http://www.vox.com/2015/4/13/8385295/science-reporting-ethics

Week 14: Moving Forward in the Field

- Fahy, D., & Nisbet, M. C. (2011). The science journalist online: Shifting roles and emerging practices. *Journalism*, *12*(7), 778-793. [PDF]
- http://www.simonowens.net/how-reddit-created-the-worlds-largest-dialogue-between-scientists-and-the-general-public
- Baron, N. (2010). *Escape from the ivory tower: a guide to making your science matter*. Island Press. [CH. 8 – PDF]

*****This course schedule is subject to change. Any changes to the schedule will be announced in class and updated on HuskyCT.

General Course Policies:

Communicating with the instructor:
Class announcements will be posted on HuskyCT. Please check frequently. You are responsible for all information posted there. Please ask if you are confused about any course content, policies, or assignments. I am always happy to meet with students during office hours, but if those times do not work for you may request an appointment at a different time. Email is by far the easiest way to get a hold of the instructor.

Attendance
Attendance is not optional and classes should not be missed except in the case of an emergency. In addition to course lecture material, announcements and information about how to complete assignments will be communicated during class. If you are not present to learn the material or how to accomplish a particular assignment, you are not likely to perform well on the assignment or exams. **While attendance is not recorded, your presence and participation will be considered as part of your grade**. If you do miss a class, please coordinate with another student to obtain missed notes and assignment information.

Class Participation
You are expected to come to each class meeting having done the required readings and ready to participate in discussions about that week's topic. Never hesitate to voice your beliefs or ask questions about the readings. No observation or question is too trivial.

Late Work
Any work that is turned in after a designated deadline will be considered late. If an assignment is turned in within 48 hours of the deadline it will receive half-credit of the graded value. Any assignment turned in after 48 hours of a deadline will not be graded and will receive a 0. There are no exceptions to this rule, unless a student has made arrangements with the professor before the assignment was due, or in the case of a documented emergency.

Classroom Civility
In this course, it is important that people and ideas are treated with respect, and that class time is used productively. Please avoid behaviors that make it difficult to accomplish our mutual objectives (e.g., side conversations, showing disrespect to classmates, coming to class late or leaving early, etc.). In addition, please refrain from using cell phones during class. Understand that I will impose appropriate penalties if such behaviors are flagrantly or routinely exhibited. Immature behavior will not be tolerated, period.

ACADEMIC MISCONDUCT:

Academic misconduct is dishonest or unethical academic behavior that includes, but is not limited, to misrepresenting mastery in an academic area (e.g., cheating), failing to properly credit information, research or ideas to their rightful originators, or representing such information, research, or ideas as your own (e.g., plagiarism). Cheating or plagiarism may result in failing this course and/or removal from the university.

Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation. If there is evidence of any deliberate violation of academic integrity (e.g., cheating, plagiarism, or the like), including collaboration or sharing of course content, materials, etc., your instructor will pursue the most punitive response the university allows. Sometimes these standards are subtle; feel free to ask if you have questions or concerns.

See http://community.uconn.edu/the-student-code-appendix-a/ for more information on the University's student code as it pertains to Academic Integrity.

STUDENTS WITH DISABILITIES:

Accommodations for Disabilities: If you are a student with a disability, who requires reasonable accommodations, please see http://www.csd.uconn.edu/ for your responsibilities. Notify me and I will do my best to provide the necessary accommodations at your request.

OTHER RESOURCES:

CLAS Academic Services Center
860-486-2822
clasadvising.uconn.edu

Career Services
860-486-3013
career.uconn.edu

Counseling and Mental Health Services
860-486-4705 (after hours: 860-486-3427)
counseling.uconn.edu

Dean of Students Office
860-486-3426
dos.uconn.edu

2020-226 LING 6798 Add Special Topic: Syntax and Cognitive Science

UCONN | COLLEGE OF LIBERAL ARTS AND SCIENCES
COMMITTEE ON CURRICULA AND COURSES

Proposal to offer a new or continuing 'Special Topics' course (xx95; formerly 298)

Last revised: September 24, 2013

Understanding the unique character of special topics courses: 'Special Topics', in CLAS curricular usage, has a narrow definition: it refers to the content of a course offering approved on a provisional basis for developmental purposes only. Compare this definition with that of variable topics (xx98) courses.

It is proposed by a department and approved conditionally by the college only with a view toward its eventual adoption as a permanent departmental offering. For this

reason, such conditional approval may be renewed for not more than three semesters, after which the course must be either brought forward for permanent adoption, or abandoned. The factotum designation xx95 is to be assigned to all such developmental offerings as proposed.

Note: Such courses are normally reviewed by the Chair of CLAS CC&C, and do not require deliberation by the Committee unless questions arise. Courses must be approved prior to being offered, but are not subject to catalog deadlines since they do not appear in the catalog. Special Topics courses are to be employed by regular faculty members to pilot test a new course, with the idea that it is likely to be proposed as a regular course in the future.

Submit one copy of this form by e-mail to the Chair of CLAS after all departmental approvals have been obtained, with the following deadlines:

(1) for Fall listings, by the first Monday in March (2) for Spring listings, by the first Monday in November

1. Date of this proposal: 7/23/20
2. Semester and year this xx95 course will be offered: Fall 2020
3. Department: LING
4. Course number and title proposed: LING 6798 Syntax and Cognitive Science
5. Number of Credits: 3
6. Instructor: Jon Sprouse
7. Instructor's position: Professor

(**Note**: in the rare case where the instructor is not a regular member of the department's faculty, please attach a statement listing the instructor's qualifications for teaching the course and any relevant experience).

8. Has this topic been offered before? N If yes, when?
9. Is this a (X) 1st-time, ( ) 2nd-time, ( ) 3rd-time request to offer this topic?
10. Short description:

The theory of generative syntax is intended to be a theory of (one component) of cognition; however, the connections between syntactic theory and the fundamental questions of cognitive science are often left unstated. The goal of this course is to make those connections explicit. To that end, in the first half of this course we will review some of the fundamental questions in cognitive science as they relate to linguistics, from the nature of mental representations to the relationships among cognitive systems. And in the second half of the course, we will explore some of the major topics in syntax (phrase structure, dependencies, agreement, binding, etc), and discuss them in relation to those fundamental questions. My hope is that by the end of the course, students will be able to articulate the connections between syntactic theory and the broader field of cognitive science for any topic that they may encounter in the field.

11. Please attach a sample/draft syllabus to first-time proposals. Attached
12. Comments, if comment is called for: None

13. Dates approved by:
Department Curriculum Committee: 6/15/20
Department Faculty:6/15/20

14. Name, Phone Number, and e-mail address of principal contact person:

Supporting Documents

If required, attach a syllabus and/or instructor CV to your submission email in separate documents. This version of the CV will be made public. Do not include any private information.

LING 6798: Syntax and Cognitive Science

Seminar: Th 1:00pm – 4:00pm
Location: Distance Learning

Instructor: **Jon Sprouse**
Professor of Linguistics
Office: Oak Hall 368A
E-mail: jon.sprouse@uconn.edu
Telephone: 860.486.6864
Office hours: By appointment

Course Description:

The theory of generative syntax is intended to be a theory of (one component) of cognition; however, the connections between syntactic theory and the fundamental questions of cognitive science are often left unstated. The goal of this course is to make those connections explicit. To that end, in the first half of this course we will review some of the fundamental questions in cognitive science as they relate to linguistics, from the nature of mental representations to the relationships among cognitive systems. And in the second half of the course, we will explore some of the major topics in syntax (phrase structure, dependencies, agreement, binding, etc), and discuss them in relation to those fundamental questions. My hope is that by the end of the course, students will be able to articulate the connections between syntactic theory and the broader field of cognitive science for any topic that they may encounter in the field.

Evaluation:

The primary content of this course will come from discussions in the seminar. Students will be expected to participate fully in the weekly discussions. Students will also be asked to write a term paper exploring the connections between a specific phenomenon or topic in syntax and one or more of the questions in cognitive science reviewed in the course. Grades will be determined by

participation (50%) and the term paper (50%).

Topics and Readings

Though I envision this as one topic per week, it is possible that some topics may be slower or faster than others. I have not taught this content before, so much will depend on the interest and enthusiasm of the participants.

Part 1: Fundamental questions in cognitive science

1. The nature of cognition

- Descartes, René. 1641. Meditations on first philosophy. https://www.earlymoderntexts.com/authors/descartes

- Chomsky, Noam. 1959. A review of B.F. Skinner's *Verbal Behavior*. Language 35: 26-58. Available online: https://chomsky.info/1967____/

2. Cognitive systems, levels of representation, and modularity

- Marr, David. 1982. Vision. MIT Press.

- Robbins, Philip. 2017. Modularity of Mind. *The Stanford Encyclopedia of Philosophy.* Edward N. Zalta (ed.). Available online: https://plato.stanford.edu/archives/win2017/entries/modularity-mind

- Lewis, Shevaun, and Colin Phillips. 2015. Aligning grammatical theories and language processing models. Journal of Psycholinguistic Research 44: 27-46.

3. Symbolic vs sub-symbolic cognition

- Fodor, Jerry, and Zenon Pylyshyn. 1988. Connectionism and Cognitive Architecture: A critical analysis.

- Smolensky, Paul. 1988. The constituent structure of connectionist mental states: a reply to Fodor and Pylyshyn. The Southern Journal of Philosophy 26: 137.

4. Complexity of cognitive systems

- Hunter, Tim. 2020. The Chomsky Hierarchy. The Blackwell Companion to Chomsky. N. Allot, T. Lohndal, and G. Rey (eds.).

5. Domain specificity versus domain generality

- Fodor, Jerry. 1975. The language of thought. Thomas Y. Crowell Co.

6. Innate versus learned systems

- Elman et al. 1996. Rethinking Innateness. MIT Press. Selections provided on course website.

- Pearl, Lisa. 2020. How statistical learning can play well with UG. In Nicholas Allott, Terje Lohndal & Georges Rey (eds.), *Wiley-Blackwell Companion to Chomsky.*

- Pearl, Lisa. 2020. Modeling syntactic acquisition. *Oxford Handbook of Experimental Syntax*.

7. Representational versus derivational systems

- Hunter, Tim. 2018. What sort of cognitive hypothesis is derivational theory of grammar? The Catalan Journal of Linguistics.

Part 2: Major topics in syntactic theory

8. Phrase structure and c-command

- Chametzky, Robert. 2000. Phrase structure: from GB to minimalism. Blackwell. (in library)

9. A'-dependencies

- Mueller, Gereon. 1995/2012. A-bar syntax: a sstudy in movement types. Mouton de Gruyter. (available online through the librear)

10. A-dependencies

- Davies, William, and Stanley Dubinsky. 2004. The grammar of raising and control. Wiley.

11. Case and Agreement

- Chapters from Agree to Agree: Agreement in the Minimalist Program. Language Science Press. https://langsci-press.org/catalog/book/254.

12. Cyclicity/Spell-Out

- Freidin, Robert. 2017. Cyclicity in Syntax. Oxford Research Encyclopedias.

- Citko, Barbara. 2014. Phase Theory: An Introduction. Cambridge University Press: Cambridge.

2020-227 MCB 3895 Add Special Topic: Human Disease and the Development of Therapeutic Agents

UCONN | COLLEGE OF LIBERAL ARTS AND SCIENCES

COMMITTEE ON CURRICULA AND COURSES

Proposal to offer a new or continuing 'Special Topics' course (3895)

Last revised: September 24, 2013

Understanding the unique character of special topics courses: 'Special Topics', in CLAS curricular usage, has a narrow definition: it refers to the content of a course offering approved on a provisional basis for developmental purposes only. Compare this definition with that of variable topics (xx98) courses.

It is proposed by a department and approved conditionally by the college only with a view toward its eventual adoption as a permanent departmental offering. For this reason, such conditional approval may be renewed for not more than three semesters, after which the course must be either brought forward for permanent adoption, or abandoned. The factotum designation 3895 is to be assigned to all such developmental offerings as proposed.

Note: Such courses are normally reviewed by the Chair of CLAS CC&C, and do not require deliberation by the Committee unless questions arise. Courses must be approved prior to being offered, but are not subject to catalog deadlines since they do not appear in the catalog. Special Topics courses are to be employed by regular faculty members to pilot test a new course, with the idea that it is likely to be proposed as a regular course in the future.

Submit one copy of this form by e-mail to the Chair of CLAS after all departmental approvals have been obtained, with the following deadlines:

(1) for Fall listings, by the first Monday in March (2) for Spring listings, by the first Monday in November

1. Date of this proposal: May 13, 2020
2. Semester and year this 3895 course will be offered: Fall Semester_2020
3. Department:Molecular and Cell Biology
4. Course number and title proposed: MCB 3895- Human Disease and the Development of Therapeutic Agents

Not open for credit to students who have passed MCB 3022W.

5. Number of Credits: 2 credits

6. Instructor: Thomas D. Abbott

7. Instructor's position: Assistant Professor in Residence
Guest Speaker and course contributor: Dr. Ala Shaqra,
Area of Expertise, Structural Biology and Therapeutic Development
(**Note**: in the rare case where the instructor is not a regular member of the department's faculty, please attach a statement listing the instructor's qualifications for teaching the course and any relevant experience).

8. Has this topic been offered before? Yes, I taught this course as a 3022W course during Summer Session I.
If yes, when? Summer of 2010-2016

9. Is this a (1) 1st-time, ( ) 2nd-time, ( ) 3rd-time request to offer this topic?

10. Short description: This course aims to link molecular biological processes to observable genetic disease phenotypes in humans. In the process opportunities to leverage advanced computational tools for the purposes of drug discovery may present themselves.

11. Please attach a sample/draft syllabus to first-time proposals. A **Syllabus has been provided below.**

12. Comments, if comment is called for: The primary foundation of the course has been taught prior, the change and addition is an applied component that enable students to learn and become actively involved in the process of identifying effective possible therapeutics.

13. Dates approved by:
Department Curriculum Committee:
Department Faculty:

14. Name, Phone Number, and e-mail address of principal contact person: Thomas D. Abbott, (860)-486-2939, thomas.abbott@uconn.edu

Supporting Documents

If required, attach a syllabus and/or instructor CV to your submission email in separate documents.

Special Topics 3895: *The Molecular Genetics of Inherited Human Disease, and the use of Computational Techniques to identify Potential Therapeutic Agents*

Dr. Thomas D. Abbott
Office: Torrey Life Science, 212
Email: thomas.abbott@uconn.edu
Phone: 486-2939
Office hours: By appointment

Guest Lecturer and Co-Designer: Dr. Ala Shaqra

Email: ala.shaqra@uconn.edu

Text: An Introduction to Human Molecular Genetics: Mechanisms of Inherited Diseases

By: Jack J. Pasternak-Please note, this text will not be made available through the UConn Co-op

COURSE Goal I: Foster-an appreciation for the causal relationship between the Human genome/cell physiology and Disease, and Demonstrate-how an understanding of the genetic/molecular nature of the cell has and will continue to enhance development of effective therapeutics.

Goal II: This course aims to link molecular biological processes to observable genetic disease phenotypes in humans. In the process opportunities to leverage advanced computational tools for the purposes of drug discovery may present themselves. The semester-long projects detailed in Appendix I were designed by Drs. Thomas Abbott and Ala Shaqra.

Objectives:

1. ***Attend weekly lectures/discussions***
2. **Student develop research projects demonstrating the ability to use various Computational Techniques in resolving potential therapeutics**
3. ***Complete quizzes relevant to course of study designed to demonstrate mastery of important concepts***

ASSIGNMENTS/ASSESSMENTS:

Quizzes
Student researched oral presentations: Please see Appendix I
Student Problem-Ligand Binding

ORGANIZATION OF CLASS PERIODS:

- Monday-Wednesday: Lecture/Discussion/Student Research Projects

CLASS SCHEDULE

Part I. The Molecular Genetics of Inherited Human Disease

Week/Day/Month	Topics	Chapter Readings
Mon. 8/31	Human Genetic Disease Genes and Phenotypes	Chapter 1: (pp. 1-9) Chapter 1: (pp. 9-17)
Wed. 9/02	Human Chromosomes and The Meiotic Process	Chapter 2: (pp. 19-22)
Mon. 9/07	**Labor Day-No classes**	

Wed. 9/09	Characterizing Human Chromosomes And Chromosome Abnormalities	Chapter 2: (pp. 23-36)
Mon. 9/14	**3D-Protein Modeling/Pymol** Dr. Ala Shaqra	Guest Lecture:
Wed. 9/16	**Introduction to Pymol Sample Problems**	Discussion
Mon. 9/21	**Pymol Continued: Introduction to Student Presentations**	Discussion
Wed. 9/23	Mendal's Laws of Inheritance and Genetic Linkage	Chapter 3: (pp. 37-47)
Mon. 9/28	Constructing Genetic Maps Multiple Alleles and Human Genetics	Chapter 3: (pp. 47-54) Chapter 3: (pp. 54-71)
Wed. 9/30	Decoding Genetic Information, Mutations of Structural Genes, Dominant Mutations and Genetic Disorders	Chapter 4: (pp. 79-95) Chapter 4: (pp. 95-105)
Mon. 10/ 05	**Chapter Quiz**	
Wed. 10/07	Restriction Endonucleases and Cloning Vectors Screening DNA Constructs	Chapter 5: (pp. 107-122)
Mon. 10/12	DNA Hybridization-Rodent Somatic Cell Hybrids DNA Libraries, Chemical Synthesis of DNA Human Genetic Files	Chapter 5: (pp. 122-139) Chapter 5: (pp. 140-149)
Wed. 10/14	Genetic Mapping of Human Chromosomes-Mapping of Genetic Disease Loci	Chapter 6: (pp. 153-159) Chapter 6: (pp. 159-171)

Mon. 10/19	Genotyping Single -Nucleotide	Chapter 6: (pp. 172-184)
	Polymorphisms, Physical Mapping	
Wed. 10/21	Cloning Human Disease Genes,	Chapter 7: (pp. 189-199)
	Detecting Mutations in Human Genes	
Mon. 10/26	**Chapter Quiz**	
Wed. 10/28	Similarity Search of a DNA Data Base	Chapter 8: (pp. 203-211)
	Functional Genomics, Proteomics	Chapter 8: (pp. 212-220)
Mon. 11/02	Phenotypic Variation of Monogenic	Chapter 10: (pp. 295-303)
	Disorders Oligogenic Disorders and Polygenic Inheritance	Chapter 10: (pp. 304-325)
Wed. 11/04	Parent of Origin Effect,	Chapter 11: (pp. 333-345)
	Prader –Willi and Angelman Syndromes	
Mon. 11/09	**Chapter Quiz**	
Wed. 11/11	Start of Student Presentations	
Mon. 11/16	Student Presentations	
Wed. 11/18	Student Presentations	

Part II. Computational Biology

Week/Day/Month	Topics	Discussion
Mon. 11/23-Sun. 11/29	**Thanks Giving Recess**	
Mon. 11/30	Introducton Protein Modeling and Ligand Docking	Dr. Ala Shaqra

Wed. 12/02	Student Practice-Ligand Docking	Assign problem
Mon. 12/07	**In class problem** Ligand docking	
Wed. 12/09	Submission of Problem Resolution	

DISABILITIES

Any student with disabilities that he/she would like the faculty to be aware of should communicate that information in confidence to the faculty and any issues arising will be addressed in accordance with the policy of the University.

ACADEMIC MISCONDUCT STATEMENT:

"Academic misconduct in any form is in violation of the University of Connecticut Student Conduct Code and will not be tolerated. This includes, but is not limited to: copying or sharing answers on tests or assignments, plagiarism, and having someone else do your academic work. Depending on the act, a student could receive an F grade on the test/assignment, F grade for the course, or could be suspended or expelled."

Policy On Plagiarism

Plagiarizing is defined as "**To steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source"**(www.Merrian-Webster.com, 2005)

Plagiarism violates the Academic Misconduct section of "The Student Code" of the University of Connecticut (http://web.uconn.edu/mcb201/misconduct.html) and will not be tolerated in MCB courses. The instructors of MCB 241W will adhere to the guidelines laid out in "The Student Code"; therefore, students should read and understand these policies and the consequence of violations.

The definition of plagiarism extends to all aspects of evaluated work in this course. **Copying another student's work is plagiarism. Failure to give full and proper citation to other people's work is plagiarism.** Full and proper citation includes putting quotation marks around any quoted passage, including a correct citation to the publication from where the ideas originated and a complete reference to that publication in the "literature cited" section. This applies to all forms of communication including websites or personal communication from someone, such as would occur in verbal discussions of scientific data. Direct quotations are appropriate when the original statements would lose clarity or intent. However, your assignment should not include multiple direct quotations. **Paraphrasing of other authors' work is acceptable given that the ideas contained in the paraphrased passage are properly attributed to the author and the ideas are re-worded into the student's own original language.**

There are many resources available to students:

PLEASE COMPLETE THE PLAGIARISM MODULE IN HUSKYCT.
Should you need additional information the following web sites may be of help:
http://www.lib.uconn.edu/using/tutorials/LILT/plagiarism.htm
http://owl.english.purdue.edu/handouts/print/research/r_plagiar.html

The penalty for copying another student's work is:

1. A "0" for the entire assignment

The **grading policies** for Special Topics 3895 are as follows.

Late Assignments: 5 point/day deduction; after seven days = 0

Grade Cutoffs:

Range	etter Grade
≥ 93	A
90 – 92	A-
87 – 89	B+
83 – 86	B
80 – 82	B-
77 – 79	C+
73 – 76	C
70 – 72	C-
67 – 69	D+
63 – 66	D
60 – 62	D-
≤ 59	F

THE END

Have a great Semester

Appendix I

Semester projects: characterizing the molecular basis of human genetic diseases.

Each student is required to choose **two** human genetic diseases for two individual projects this semester. Each project will entail gathering, analyzing, and presenting in oral and written forms research done on a disease of the student's choosing (see the Google sheets file).

Each student will produce a written report that answers/addresses the following line items.

- An **abstract** that summarizes the main points of the report.
- An **introduction** section that provides background information sufficient for your readers to grasp, on a surface level, the disease being presented.
- The **body** of report. This is the main section of the report where you will review primary research literature (no textbooks) that cover in detail the following questions/statements:
  - What is the prevalence of the disease. Is it rare (1 in a million individuals) or relatively common (1 in 2,500 individuals) or uncommon. Approximately how many people worldwide are afflicted with the disease?
  - Describe the phenotypes and symptoms of the disease.
  - Describe the treatment options available. Are these options small molecules or biologics? How does the treatment(s) work on a molecular level? Do these treatments address the root cause of the disease or simply manage its symptoms?
  - Does the disease predominantly occur within specific human populations (Cacuasians, Latinos, Middle Easterners, Asians, or of African origin)? Is it found in specific regions of the world or dispersed?
  - A gene characterization. The name of the gene that is involved in the disease state. How large is the gene (bp)? Where is it located (chromosome, locus)
  - Describe the underlying molecular basis for the disease (gene deficiency or loss of function).
  - An in depth review of the gene protein product. This should include the following.
    - How large is the protein? Meaning, how many amino acids does the protein possess? What is the molecular weight of the protein? What is the isoelectric point of the protein? Is it a basic or acidic protein?
    - Is the protein an enzyme? If so, what type? Does the protein have binding partners such as metabolites or other proteins?
    - What is the function of the protein? Describe the biochemical pathway?
    - Is there a known three-dimensional structure of the protein? Which biophysical technique was used to determine its structure? Note: if your gene of interest does not possess a protein product with a known structure, predict the structure using one of the many available online tools. Contact Dr. Shaqra for further guidance in this process.
    - Download the protein structure from the Protein Data Bank (PDB). Dr. Shaqra will present the basics of how to navigate the PDB.
    - The following should be done using the freely available software PyMOL. Dr. Shaqra will lead a seminar on molecular visualization and modeling. Students will be required to create figures of their modeling analogous to peer-reviewed publications in the field of protein structure and function.

- How many domains does your protein of interest possess? Describe the domain arrangement. Color each domain a unique color rather than shades of the same color. Primary colors are best.
- If your protein of interest in an enzyme, characterize its active site domain. Describe its secondary structure arrangement. Does the active site possess beta sheets or alpha helices?

Of note: The highlighted portion is a work in progress.

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2020-228 MCB 5895 Add Special Topic: Horizontal Gene Transfer

UCONN | COLLEGE OF LIBERAL ARTS AND SCIENCES

COMMITTEE ON CURRICULA AND COURSES

Proposal to offer a new or continuing 'Special Topics' course

1. Date of this proposal: 3-13-20
2. Semester and year this xx95 course will be offered: Fall 2020
3. Department:MCB
4. Course number and title proposed: 5895 Special Topics: Horizontal Gene Transfer, from mechanisms to outcomes
5. Number of Credits: 3
6. Instructor: Dr. Thane Papke
7. Instructor's position: Professor
8. Has this topic been offered before? No If yes, when?
9. Is this a (X) 1st-time, ( ) 2nd-time, ( ) 3rd-time request to offer this topic?
10. Short description: How quorum sensing, natural transformation and biofilm formation are interwoven with horizontal gene exchange in Prokaryotes.

11. Please attach a sample/draft syllabus to first-time proposals.
12. Comments, if comment is called for:
13. Dates approved by:
    Department Curriculum Committee: March 22, 2020
    Department Faculty: April 7, 2020

14. Name, Phone Number, and e-mail address of principal contact person:
David Knecht, David.knecht@uconn.edu

Supporting Documents

Horizontal Gene Transfer, from mechanisms to outcomes: MCB 5895
Fall, 2020
Instructor: Dr. Thane Papke
Frequency/Time: 2x/week; 1 hour, 20 minutes per period

Credits: 3

Description: Readings from the scientific literature will provide a focus for investigating how quorum sensing, natural transformation and biofilm formation are interwoven characteristics that collectively provide a controlled and biased process for the horizontal gene exchange in Prokaryotes. Then, gene exchange will be discussed for understanding how this process contributes uniquely to prokaryotic evolution (e.g., via adaption to environments, generation of metabolic pathways and how they form separate lineages).

Contact Info:
Office BSP 402; 860-486-7963; thane@uconn.edu

Office Hours:
After class, and by appointment.

Course Objectives:
Prokaryotes generate diversity and evolve mainly through Horizontal Gene Transfer. In order to gain a deeper appreciation for prokaryote evolution, and how they adapt to their environment, we will examine the scientific literature demonstrating mechanisms and strategies for gene exchange, as well as the outcomes.

Course goal:
To develop intellectual skills that enable students to synthesize facts, principles, and logic that allows understanding the role of microorganisms in our world. To develop skills and gain confidence in communicating through oral presentations.

NO TEXTBOOK! Each student is responsible for finding the article. All articles are available and free from the Internet, if using a computer on campus. If off campus, you can still get it for free, but you have to sign into the library.

Grades:

Participation: Students are required to come to class prepared to discuss the assigned reading! There will be an open-ended discussion about the reading material. Each student is expected to participate voluntarily every day. **Additionally,** each student will present the assigned reading and lead the discussion during at least 2 class periods.

Presentation: Each student will make a 30-minute PowerPoint presentation (approximately 30 slides). Learning to give oral presentations is an important aspect of this class, and an applicable life-long skill for all scientists.

Breakdown of final grade: Participation 50%; Presentation 50%

Grading Scale:

Grade	Letter Grade	GPA
97-100	A+	4.3
93-96	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Reading Topics:

Week 1: Quorum Sensing

Week 2: Biofilms

Week 3: Natural transformation, the basics

Week 4: Links between quorum sensing, biofilms and natural transformation in the Gram positive genus *Streptococcus* spp.

Week 5: Links between quorum sensing, biofilms and natural transformation in the Gram negative species *Vibrio cholerae*.

Week 6: Archaeal mechanisms of gene transfer

Week 7: Cooperation in prokaryotes, via quorum sensing and HGT.

Week 8: Impact of horizontal gene transfer on the formation of species.

Week 9: Impact of horizontal gene transfer on adaptation to environments

Week 10: Impact of horizontal gene transfer on the creation of metabolic pathways

Week 11: Student presentations

Week 12: Thanksgiving break

Week 13: Student presentations

Week 14: Student presentations

Important Dates

Week 6: Student meetings to discuss presentation. Student must meet with Dr. Papke at a scheduled time to discuss topic of presentation. Bring with you two review articles, and three primary literature articles on the topic.

Week 9: 1st round of student practice talks. Must meet with Dr. Papke, to go over your Power Point presentation: bring with you your draft presentation, and be prepared to present and discuss it.

Topics for presentations:

1) Viruses evolution/ecology and recombination
2) Photosynthesis
3) Sulfur cycle
4) CO_2 fixation pathways
5) Rhodopsins
6) Nitrogen cycle
7) Origins of life
8) Origins of Eukaryotes

Each student is expected to abide by the University of Connecticut Code of Conduct. We are all here to learn and to be excited about learning.

Plagiarism:

In the past there have been misunderstandings about whether it is appropriate to copy material from references or from other students. Briefly, it is never appropriate to copy anything written

by someone else: neither students, published works, dissertations, nor internet material. The work you turn in must be in your own words. Do not copy anything from work written by others. If you must quote from written work (and this is rarely done in scientific work), the passage that is quoted must be enclosed in quotation marks and followed immediately by the reference citation. All facts and interpretations of facts that are not your own must include a literature citation. When describing factual material, you should restate it in your own words. If you want to include tables of data or diagrams from the literature, you may do so as long as you cite the appropriate reference in the legend to the figure or table. All the references in your reference list should be cited in your work. Do not cite sources from which you did not use information.

Excerpt from the Student Conduct Code (http://www.dosa.uconn.edu/scc11.html)

If you have any questions about the acceptability of your work regarding plagiarism, contact Dr. Papke before submitting the work. After you submit the work it is too late and any violations of this policy will be dealt with according to the guidelines given in Section XI of the *Student Conduct Code* (see below).

You are recommended to check your own papers for plagiarism with freely available on line plagiarism detection software. Here are some example urls:

http://www.dustball.com/cs/plagiarism.checker/
http://www.plagiarismchecker.com/
http://www.plagtracker.com/
http://plagiarisma.net/
http://www.grammarly.com/?q=plagiarism&gclid=CJvHkL_IiLICFcXb4Aod0HYAcw

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Academic Misconduct

A fundamental concept of all educational institutions is academic honesty. All academic work depends upon respect for and acknowledgment of research and ideas of others. Misrepresentation of someone else's work as one's own is a most serious offense in any academic setting.

No academic misconduct, including any forms of cheating and plagiarism, can be condoned. Academic misconduct includes but is not limited to providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation including papers, projects, and examinations; attempting to influence one's academic evaluation for reasons other than academic achievement or merit; presenting, as one's own, the ideas or words of another for academic evaluation without proper acknowledgment; doing unauthorized academic work for which another person will receive credit or be evaluated; and presenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved.

Also, one is not allowed to cooperate or be an accessory to another's academic misconduct. Thus a student who writes a paper or does an assignment for another student is an accomplice and must be held accountable just as severely as the other. It is perhaps less obvious, but it is equally logical, that a student who knowingly permits another to copy from his or her own paper, examination, or project should be held as accountable as the student who submits the copied material.

Details of the proceedings involved in academic misconduct cases are provided on the web site http://www.dosa.uconn.edu/scc11.html.

2020-229 AFRA/SOCI 2250 Add Course (guest: Fumilayo Showers) (G) (S)

COURSE ACTION REQUEST	
CAR ID	20-2755
Request Proposer	Showers
Course Title	Racial disparities in health
CAR Status	In Progress
Workflow History	Start > Africana Studies Institute > Sociology > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Add Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	AFRA
School / College	College of Liberal Arts and Sciences
Department	Africana Studies Institute
Course Subject Area #2	SOCI
School / College #2	College of Liberal Arts and Sciences
Department #2	Sociology
Reason for Cross Listing	The proposing faculty has a joint appointment in both units
Course Title	Racial disparities in health
Course Number	2250
Will this use an existing course number?	No

CONTACT INFO	
Initiator Name	Fumilayo E Showers
Initiator Department	Sociology
Initiator NetId	fus19001
Initiator Email	fumilayo.showers@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES

Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	Yes
Content Area 1 Arts and Humanities	No
Content Area 2 Social Sciences	Yes
Content Area 3 Science and Technology (non-Lab)	No
Content Area 3 Science and Technology (Lab)	No
Content Area 4 Diversity and Multiculturalism (non-International)	No
Content Area 4 Diversity and Multiculturalism (International)	No
General Education Competency	
Environmental Literacy	
Scheduling Components	Lecture
Number of Sections	1
Number of Students per Section	35
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	3
Instructional Pattern	lectures, discussion, invited speakers

COURSE RESTRICTIONS	
Prerequisites	None
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	Proposing faculty member is located in Storrs
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide proposed title and complete course catalog copy	AFRA/SOCI 2250. Racial Disparities in Health 3 credits. Social determinants of health. Racial differences in health outcomes. Social, economic, and political structures and their impacts on health organization and inequalities in care delivery. Patient-provider interactions; meanings of illness. (CA2)
Reason for the course action	This course expands curricular offerings in Sociology and Africana Studies. The proposal reflects the teaching and research expertise of a newly hired faculty member
Specify effect on other departments and	One course in Allied Health, 4503 - Poverty and Public Health has related content, in that it explores racial and class-based disparities in health and the social determinants of health from a practitioner and/or administrative perspective. This course is however, open only to juniors. "Racial disparities in health" is an introductory/survey

overlap with existing courses	course framed by an explicitly sociological perspective. The course also distinguishes itself through a focus on social determinants of health, and social understandings of the issue, as opposed to a biomedical perspective. It offers a critical perspective on social structures and institutions that shape individual and population health by centering an analysis of race. It centers the experiences of African descended populations in the United States, making it distinct from other courses.
Please provide a brief description of course goals and learning objectives	This course aims for students to: apply sociological methodological and theoretical tools to understanding racial disparities in health in the U.S. Evaluate the institutions, players, and factors that shape the U.S health care infrastructure and assess how they impact health outcomes. Attain a critical understanding of the effects of race as well as socio-economic factors on health. Connect individual health narratives and experiences to structural issues within the health care system and in society.
Describe course assessments	1. Class participation: active verbal participation, thoughtful comments and questions. short writing assignments in response to specific questions. facilitation of classroom discussion and oral presentations. These assignments are intended to evaluate preparedness for class and ensure engagement with class readings and concepts. 2. Two examinations - These exams allow students to synthesize and analyze readings and lecture notes. 3. Research paper - That allows students to build and expand on knowledge gained from class. Apply theoretical concepts and develop techniques in scholarly writing. Enhance writing and critical thinking skills.
General Education Goals	Through the lens of race, health, medicine and society, this course allows for students to acquire intellectual breadth, critical perspectives(on health institutions, social organization of health care settings, medical racism, etc), awareness of their times and society, and the diversity of the human experience.
Content Area: Social Sciences	This courses utilizes sociological perspectives to examine how social structures, societal arrangements, including how resources are allocated, shape individual and population health. It will enable students to understand how race and its intersection with other social attributes esp social class influence disparate health outcomes. By focusing on the social determinants of health, it offers a useful addition to biomedical perspectives on health and human behavior. The insights that a sociological lens offers are extremely useful to analyze contemporary events, chiefly the global pandemic of coronavirus disease 2019, and its disproportionate toll on communities of color
Syllabus and other attachments	**Attachment Link**: AFRA-SOCI Racial disparities in health syllabus.docx **File Name**: AFRA-SOCI Racial disparities in health syllabus.docx **File Type**: Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Start	Fumilayo E Showers	09/04/2020 - 14:35	Submit		None
Africana Studies Institute	Shawn Salvant	09/04/2020 - 16:21	Approve	9/4/2020	Approved
Sociology	Ralph B McNeal	09/04/2020 - 16:42	Approve	9/3/2020	I noticed that there is nothing checked off for Content Area 4. We leave that to Fumi and the Africana Studies Institute to pursue if they so choose. They can return at a later date if they want to also pursue that GenEd category.

AFRA/SOCI 2250 PROPOSED COURSE
RACIAL DISPARITIES IN HEALTH
CLASS TIME AND LOCATION TBD
Instructor: Fumilayo Showers

Course Description:

This course investigates racial disparities in health, through a focus on the social determinants of health, i.e. how the conditions of life (where and how we live, eat, work, and the way we organize our lives) influence health. We will utilize an intersectional lens to detail racial disparities in health

outcomes. We will develop a broad understanding of the social, economic, and political factors that shape the organization of health care in the U.S., inequalities present within the U.S health care delivery system, and the devastating toll on communities of color. While centering broad structural factors, we will also narrow our focus to understand how racism manifests in doctor-patient interactions, and how individuals cope with and make sense of illness.

Course Objectives

This course aims for students to:

- Apply sociological methodological and theoretical tools to understanding health disparities in the U.S
- Evaluate the institutions, players, and factors that shape the U.S health care infrastructure and assess how they impact health outcomes
- Attain a critical understanding of the effects of socio-economic factors on health
- Connect individual health narratives and experiences to structural issues within the health care system and in society

Required Readings

- Readings for this class will be posted on HUSKY CT
  Please print out and bring all non-textbook readings to class.

COURSE REQUIREMENTS:

A. **Class Participation**.

I expect and require active participation from all students. You must actively engage with the readings and actively participate in class activities. Active participation in class goes beyond just being physically present. It means completing reading and other assignments BEFORE class, engaging in class discussion, and critically examining class concepts. Your class participation grade will be based on the oral contribution you have made (questions, thoughtful comments and answers) toward the learning experience. In some class meetings, I will require that you do short in-class writing assignments or administer pop quizzes.

B. Talking Points

To objectively assess preparedness for class and (to consider the fact that some people are more comfortable speaking out in class than others), I am asking you to come to some class sessions with what I call, TALKING POINTS. For EACH article length reading assigned you should prepare ONE TALKING POINT. In these talking points you should address any ONE of the following:

(1) WHAT was the most important or interesting sentence/statement/argument in the reading and WHY do you think this is the case **OR** (2) WHICH sentence/statement/argument in the reading do you like to least/disagree with/find upsetting and WHY? **OR** (3) You might list a statement/quotation that you found illuminating and why or list a statement for which you might need further clarification, or questions that you might need answered.

You should clearly indicate **1) the author and title of the reading you are discussing and 2) the date assigned.**

Post your Talking points to HUSKYCT by 9pm the day before the class for which the readings are assigned.

Submit your talking points as one Word document and indicate the date of the readings you are discussion and the name of author/title for each article you are discussing

C. Two Take Home Examinations

You will write two take-home exams in response to questions about theories and empirical studies on the sociology of health. The completed exams should be 4-5 pages in length. Times New Roman, 12 point font, 1inch margins. These exams allow you the opportunity to synthesize and analyze reading and lecture materials and critically respond specific topics on health and society. Due dates for take home exams TBD

D. Research Project and Presentation

You will work in pairs to research a health condition and then present your health research project orally (25 minutes), preferably as a PPT, to the class. You will select one illness/health condition and describe different aspects of the illness/health condition centering impact on racial minority populations Provide, 1) general medical and sociological understanding; 2) social/institutional control mechanisms; and 3) demographic prevalence; and 4) policy implications.

GRADING:

Class Participation (20%)
Talking Points (30%)
Two Take-Home Examinations (15% each)
Research presentation (20%)
Total (100%)

Grades are determined on a 100-point scale. Letter grades are broken down as follows:
A=93+, A-=90-92; B+=88-89; B=83-87; B-=80-82; C+=78-79; C=73-77; C-=70-72; D+=68-69; D=60-67; F< 60.

HuskyCT

For students currently enrolled in the course, HuskyCT is where you will find all your information about the course. Your syllabus, grades, additional readings and handouts will be posted on blackboard: https://huskyct.uconn.edu/.
Please check your email and HuskyCT frequently, as I will use them to communicate with you regarding this course. Email is the best way to contact me. Please send me an email if you need assistance or if you are having any difficulties in this course. I will reply to email within 24hrs. Also, please stop by during my office hours to discuss your progress in the class

Plagiarism and Academic Dishonesty

I expect students to take personal responsibility for their intellectual work and to respect and acknowledge the ideas of others. Academic honesty means doing your own work and giving proper credit to others whose work and thoughts you may draw upon. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. For further information on UConn's official policies on academic below.

https://community.uconn.edu/academic-misconduct/proactive-strategies-for-students-to-minimize-academic-misconduct/
Penalty for plagiarism is failure of this course

Individuals needing special accommodations
The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or http://csd.uconn.edu/.
Any student whose religious obligations or personal commitments warrant special considerations, please see me.

Other university policies are in effect in this course. Please see
https://provost.uconn.edu/faculty-and-staff-resources/syllabi-references/

Course and Reading/Outline

Week 1: Understanding Medical Sociology and defining health disparities

*** Final readings will be selected from these lists.**

Hankin, Janet R. and Eric R. Wright. 2010. "Reflections on Fifty Years of Medical Sociology." *Journal of Health and Social Behavior* 51: 10-5.

Karvonen, Sakari, Kestilä, L.M. and Mäki-Opas, T.E. (2018). "Who Needs the Sociology of Health and Illness? A New Agenda for Responsive and Interdisciplinary Sociology of Health and Medicine." *Frontiers in Sociology, 3, p.4*.

Sen, Amartya. 2002. "Why Health Equity?" *Health Economics* 11:659-66.

Braveman, Paula A., Shiriki Kumanyika, Jonathan Fielding, Thomas LaVeist, Luisa N. Borrell, Ron Manderscheid and Adewale Troutman. 2011. "Health Disparities and Health Equity: The Issue Is Justice." *American Journal of Public Health* 101(S1):S149-S55

Week 2: Social determinants of health

Readings

McKinlay, John P. and Sonja M. McKinlay. 1977. "The Questionable Contribution of Medical Measures to the Decline of Mortality in the United States in the Twentieth Century" *The Milbank Memorial Fund Quarterly. Health and Society*, Vol. 55, No. 3

Link, Bruce G. and Jo Phelan. 1995. "Social Conditions as Fundamental Causes of Disease." *Journal of Health and Social Behavior* 35(Extra Issue):80-94.

Lutfey, Karen and Jeremy Freese. 2005. "Toward Some Fundamentals of Fundamental Causality: Socioeconomic Status and Health in the Routine Clinic Visit for Diabetes." *American Journal of Sociology* 110(5):1326-72.

Film "Unnatural Causes" – Episode 1 "In Sickness and in health"

Talking Points Due

Week 3: Social Class and health inequality

Readings

Marmot, Michael. 2005. "Social Determinants of Health Inequalities"
https://www.who.int/social_determinants/strategy/Marmot-Social%20determinants%20of%20health%20inqualities.pdf

Adler, Nancy E,. M. Maria Glymour, Jonathan Fielding. 2016. "Addressing Social Determinants of Health and Health Inequalities" *JAMA*, 315:6

Adler, Nancy E. and Katherine Newman. 2002. "Socioeconomic Disparities in Health: Pathways and Policies." *Health Affairs* 21(2):60-76.

S. Leonard Syme, Lisa F Berkman, 1976. "Social Class Susceptibility and Sickness, *American Journal of Epidemiology*, (104)11

Film: "Unnatural Causes"- Episode 5 "Place Matters"

Talking Points Due

Week 4: Neighborhood contexts, "place" and health

Readings

Chitewere, Tendai, Janet K. Shim, Judith C. Barker and Irene H. Yen. 2017. "How Neighborhoods Influence Health: Lessons to Be Learned from the Application of Political Ecology." *Health & Place* 45:117-23.

Bedimo-Rung, Ariane L., Andrew J. Mowen and Deborah A. Cohen. 2005. "The Significance of Parks to Physical Activity and Public Health: A Conceptual Model." *American Journal of Preventive Medicine* 28:159-68.

Sampson, Robert J. and Alix S. Winter. 2016. "The Racial Ecology of Lead Poisoning: Toxic Inequality in Chicago Neighborhoods, 1995-2013." *Du Bois Review* 13(2):261-83.

Caspi, Caitlin E., Glorian Sorensen, S.V. Subramanian and Ichiro Kawachi. 2012. "The Local Food Environment and Diet: A Systematic Review." *Health & Place* 18:1172-87.

Jacobs, David E. 2011. "Environmental Health Disparities in Housing." *American Journal of Public Health* 101(S1):S115-S22.

Keene, Danya E. and Mark B. Padilla. 2010. "Race, Class, and the Stigma of Place: Moving to "Opportunity" in Eastern Iowa." *Health & Place* 16:1216-23.

Talking Points Due

Week 5: Health Behaviors
Readings

Pampel, Fred C., Patrick M. Krueger and Justin T. Denney. 2010. "Socioeconomic Disparities in Health Behaviors." *Annual Review of Sociology* 36:349-70.

Mirowsky, John and Catherine E. Ross. 2015. "Education, Health, and the Default American Lifestyle." *Journal of Health and Social Behavior* 56(3):297-306

Marantz, Paul R. 1990. "Blaming the Victim: The Negative Consequence of Preventive Medicine." *American Journal of Public Health* 80:1186-8

Talking Points Due

Week 6: Stress, social integration and health
Readings

Thoits, Peggy A. 2010. "Stress and Health: Major Findings and Policy Implications." *Journal of Health and Social Behavior* 51:S41-S53.

Schneiderman, Neil, Gail Ironson and Scott D. Siegel. 2005. "Stress and Health: Psychological, Behavioral, and Biological Determinants." *Annual Review of Clinical Psychology* 1:607-28.

Umberson, Debra, Hui Liu and Corinne Reczek. 2008. "Stress and Health Behaviour over the Life Course." *Stress Processes across the Life Course* 13:19-44.

Meyer, Ilan H. 2003. "Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence." *Psychological Bulletin* 129(5):67497.

Berkman, Lisa F., Thomas Glass, Ian Brissette and Teresa E. Seeman. 2000. "From Social Integration to Health: Durkheim in the New Millennium." *Social Science & Medicine* 51(843-857).

Smith, Kirsten P. and Nicholas A. Christakis. 2008. "Social Networks and Health." *Annual Review of Sociology* 34:405-29

Talking Points Due

Week 7: Race/Ethnicity and Health: Understanding Racism
Readings

Jones, Camara Phyllis. 2000. "Levels of Racism: A Theoretic Framework and a Gardener's Tale." *American Journal of Public Health* 90 (1)212-15.

Williams, David R. and Chiquita Collins. 2001. "Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health." *Public Health Reports* 116(5):404-16.

Kwate, Naa Oyo A. and Ilan H. Meyer. 2011. "On Sticks and Stones and Broken Bones: Stereotypes and African American Health." *Du Bois Review* 8(1):191-98.

Gravlee, Clarence C. 2009. "How Race Becomes Biology: Embodiment of Social Inequality." *American Journal of Physical Anthropology* 139:47-57.

Factor, Roni, Ichiro Kawachi and David R. Williams. 2011. "Understanding High-Risk Behavior among Non-Dominant Minorities: A Resistance Framework." *Social Science & Medicine* 73:1292-301.

Talking Points Due

Week 8: Racial disparities in health

Readings

Williams, David R. and Michelle Sternthal, M. 2010. "Understanding Racial-Ethnic Disparities in Health: Sociological Contributions" *Journal of Health and Social Behavior* 51 (1_suppl), pp. S15-S27

Williams, David R. and Selina A. Mohammed. 2013. "Racism and Health: Pathways and Scientific Evidence pp. 51-68 *American Behavioral Scientist* 57(8).

Williams, David R. 2012. "Miles to Go before We Sleep: Racial Inequities in Health." *Journal of Health and Social Behavior* 53(3):279–95.

Film "Unnatural Causes" - Episode 4 "Bad Sugar"

Talking Points Due

Week 9: Gender, sexuality and health disparities

Readings

Bird, Chloe E. and Patricia P. Rieker. 1999. "Gender Matters: An Integrated Model for Understanding Men's and Women's Health." *Social Science & Medicine* 48:745-55.

Bowleg, Lisa. 2012. "The Problem with the Phrase Women and Minorities: Intersectionality—an Important Theoretical Framework for Public Health." *American Journal of Public Health* 102(7):1267-73.

Courtenay, Will H. 2000. "Constructions of Masculinity and Their Influence on Men's Well-Being: A Theory of Gender and Health." *Social Science & Medicine* 50:1385-401

Mayer, Kenneth H., Judith B. Bradford, Harvey J. Makadon, Ron Stall, Hilary Goldhammer and Stewart Landers. 2008. "Sexual and Gender Minority Health: What We Know and What Needs to Be Done." *American Journal of Public Health* 98(6):989-95.

Sacks, Tina. 2019. Invisible Visits: Black Middle Class Women in the American Healthcare System Oxford: Oxford University Press (Selected chapters)

Talking Points Due

Week 10: Medicine and the Reproduction of Inequality

Readings

Viruell-Fuentes, Edna A., Patricia Y. Miranda, and Sawsan Abdulrahim. 2012. "More than Culture: Structural Racism, Intersectionality Theory, and Immigrant Health." *Social Science & Medicine* 75(12):2099–2106.

Olsen, Laura. 2019. "The Conscripted Curriculum and the Reproduction of Racial Inequalities in Contemporary US Medical Education. *Journal of Health and Social Behavior*, 60(1) 55 – 68.

Shim, Janet K. 2010. "Cultural Health Capital: A Theoretical Approach to Understanding Health Care Interactions and the Dynamics of Unequal Treatment." *Journal of Health and Social Behavior* 51(1):1

Gengler, Amanda. 2014. "I Want You to Save My Kid!: Illness Management Strategies, Access, and Inequality at an Elite University Research Hospital," *Journal of Health and Social Behavior* (55) 3)

Gage-Bouchard, E. A. 2017. Culture, Styles of Institutional Interactions, and Inequalities in Healthcare Experiences. *Journal of Health and Social Behavior*, *58*(2), 147–165.

*Film Unnatural Causes: Is Inequality Making Us Sic*k? Episode 3 "Becoming American"

Talking Points Due

Week 11: Immigration and health

Readings

Asad, Asad L. and Matthew Clair. 2018. "Racialized Legal Status as a Social Determinant of Health" *Social Science and Medicine*, 199 (19-28)

Patler, Caitlin, and Whitney Laster Pirtle. 2018. "From undocumented to lawfully present: Do changes to legal status impact psychological wellbeing among Latino immigrant young adults?" *Social Science & Medicine* 199 (39-48).

Viruell-Fuentes, Edna A. 2007. "Beyond Acculturation: Immigration, Discrimination, and Health Research among Mexicans in the United States." *Social Science & Medicine* 65:1524-35.

Light, Donald and Mélanie Terrasse. 2017. "Immigrant Access in the Affordable Care Act: Legacies of the Confederacy." *Journal of Ethnic and Migration Studies* 43(12):1985-2002

Film: Giving Birth in America

Talking Points Due

Week 12: The Sick-role and doctor-patient relationships

Readings

Parsons, Talcot. 1951. "Illness and the Role of the Physician: A Sociological Perspective." *American Journal of Orthopsychiatry*, 21(3), pp. 452-460

Burnham, John C. 2014. "Why Sociologists Abandoned the Sick Role Concept." *History of the Human Sciences,* 27 (1), pp 70-87

Trillin, Alice Stewart. 1981. "Of Dragons and Garden Peas: A Cancer Patient Talks to Doctors." *New England Journal of Medicine* 304(12):699-701

Talking Points Due

Week 13: Medical Professions

Readings

Conrad, Peter and Joseph W. Schneider (1992) "Professionalization, Monopoly and the Structure of Medical Practice," pp. 271-278 in The Sociology of Health & Illness: Critical Perspectives (10th Edition) Peter Conrad and Valerie Leiter (eds) Thousand Oaks, California: SAGE Publications, Inc.

Vinson, Alexandra (2019) "A Short White Coats: Knowledge, Identity, and Status Negotiations of First-Year Medical Students*" Symbolic Interaction*, (42): 3, pp. 395–411

Talking Points Due

Week 14: Medicalization and contested illness

Readings

Pryma, Jane. 2017. "'Even my sister says I'm acting like a crazy to get a check': Race, gender, and moral boundary-work in women's claims of disabling chronic pain." *Social Science and Medicine* 181: 66-73

Glenton, Claire. 2003. "Chronic Back Pain Sufferers--Striving for the Sick Role." *Social Science & Medicine* 57:2243-52.

Burgess, D. J., Crowley-Matoka, M., Phelan, S., Dovidio, J. F., Kerns, R., Roth, C. & van Ryn, M. 2008. "Patient Race and Physicians' Decisions to Prescribe Opioids for Chronic Low Back Pain." *Social Science & Medicine* 67(11): 1852-60

Clarke, Adele E., Janet K. Shim, Laura Mamo, Jennifer Ruth Fosket and JenniferR. Fishman. 2013. "Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine." *American Sociological Review* 68(2):161-94.

Talking Points Due

Week 15: Gender medicalization and health

Readings

Scott, Allison. 2009. "Illness Meanings of AIDS Among Women With HIV: Merging Immunology and Life Experience" *Qualitative Health Research*, (19) 4: 454-465

Malacrida, Claudia and Tiffany Boulton. 2014. "The Best Laid Plans?: Women's Choices, Expectations and Experiences in Childbirth" *Health*, (18)1

Loe, Meika. 2008. "The Prescription of a New Generation." *Contexts* 7(2):46-49.

Charmaz, Kathy. 1995. "The Body, Identity, and Self: Adapting to Impairment." *The Sociological Quarterly* 36(4):657–80.

Talking Points Due

2020-230 HIST 2205W Revise Course (guest: Frank Costigliola) (G) (S)

COURSE ACTION REQUEST	
CAR ID	20-2594
Request Proposer	Costigliola
Course Title	Personality and Power in History
CAR Status	In Progress
Workflow History	Start > History > College of Liberal Arts and Sciences > Return > History > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	1
Course Subject Area	HIST
School / College	College of Liberal Arts and Sciences
Department	History
Course Title	Personality and Power in History
Course Number	3205
Will this use an existing course number?	No

CONTACT INFO	
Initiator Name	Frank Costigliola
Initiator Department	History
Initiator NetId	frc02004
Initiator Email	frank.costigliola@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	Yes
Content Area 1 Arts and Humanities	Yes
Content Area 2 Social Sciences	No
Content Area 3 Science and Technology (non-Lab)	No
Content Area 3 Science and Technology (Lab)	No
Content Area 4 Diversity and Multiculturalism (non-International)	No
Content Area 4 Diversity and Multiculturalism (International)	No
Is this course in a College of Liberal Arts and Sciences General Education Area A - E?	Yes
Specify General Education Areas	Area C: History
General Education Competency	W
Will there also be a non-W section?	Yes
Environmental Literacy	No
Number of Sections	1
Number of Students per Section	19
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	3
Instructional Pattern	This course will be organized as a seminar course that can be taught at other campuses as well as at Storrs.

COURSE RESTRICTIONS	
Prerequisites	none
Corequisites	none
Recommended Preparation	none
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No
Is Consent Required for course?	No Consent Required

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	Yes
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	HIST 3205 - Personality and Power in the Twentieth Century 3.00 credits Graded Dynamic leadership in historical crises, including, for example, Churchill, Roosevelt, Stalin, Hitler, DeGaulle, Kennedy, and Mao.
Provide proposed title and complete course catalog copy	HIST 2205. Personality and Power since 1900 3.00 credits Graded Prerequisites: None Analysis of the links between personality and power in various countries and across different eras. CA 1 (C) HIST 2205. Personality and Power since 1900 3.00 credits Graded Prerequisites: ENGL 1007 or 1010 or 1011 or 2011
Reason for the course action	"History is just about kings, presidents, and dates." For many years, that simplistic, "Great Man" view of what is entailed in studying the multi-dimensional, multi-cultural past of human experiences prevailed in high school history courses and in popular perceptions. The narrow focus on those perceived at the top of the hierarchy – who were mostly men and overwhelmingly white – squeezed out the story the vast majority of people. Beginning in the 1970s, however, social history emphasized class, race, and gender to analyze how ordinary people thought and lived. Then the cultural turn of the 1980s-90s challenged the assumptions of uncritical positivism while encouraging the investigation of culture, language, and meaning. In the past two decades, the linguistic and the emotional turns have furthered such inquiry while also probing more deeply into how patterns of thought and belief relate to decisions and actions. Aided by these conceptual tools, historians can now return to the study of leaders to offer students a deeper, more sophisticated understanding of those individuals who, operating within their societal and cultural structures, wield what can be enormous power. By personality, we mean a pattern of emotional and behavioral responses and a system of beliefs that are grounded in an individual's personal, societal, and cultural background. Since most, though by no means all, of these leaders were men, their personalities necessarily entailed their particular construction and performance of masculinity. Women with power have generally had to navigate their own constructions and performance of gender within the constraints of a male-dominated order. The Department of History proposes to revise an existing, relatively narrow course, HIST 3205 - Personality and Power in the Twentieth Century, by broadening the course in terms of its geographical and chronological scope. The revised course, which will be open to a wide range of students, will be at the 2000-level course with a W option. The revised course, titled "Personality and Power in History," might be taught by history instructors with a range of geographical, chronological, and topical interests. I myself have planned a course that investigates the dilemmas of charismatic leadership and constitutional restraints in the U.S. and in Europe since 1900. Colleagues might teach a course on emperors and other leaders of China, on the challenges of women leaders, on the experiences of civil rights leaders, on the strategies of corporate leaders, etc.
Specify effect on other departments and overlap with existing courses	HIST 3205, which this proposal will revise, has for decades been taught in Storrs and at Stamford. While HIST 2205 will deal with geographical and topical areas that are covered by other history courses, its focus on personality and power is unique in the History Department. In other departments, POLS 3476, World Political Leaders, deals with leaders but does not focus explicitly on personality. Nor does the course take a historical perspective. Similarly, POLS 3622, American Political Leadership, does not offer a historical perspective. POLS 3647, Black Leaders and Civil Rights, does offer a view of the past, but is not taught by a historian. Although HIST 2205 deals with such matters as personality, emotion, and charisma, it is not a course in "Psychohistory," an intellectual trend popular in the 1950s-80s that drew rigidly from Freudian psychological theory.
Please provide a brief description of course goals and learning objectives	As a course designed to be taught by instructors with a range of perspectives and scholarly and pedagogical interests, Personality and Power in History will have different iterations. But it is likely that at least some of these versions will be spurred by the recent development in many countries of highly concentrated executive power exercised by charismatic, authoritarian-minded leaders. This current phenomenon prompts us to probe history for answers: How in the past have such figures come to power, how have they exercised that power, and how effective have been the institutional (both constitutional and normative) checks on their power? What have been the differences between more dictatorial and more democratic leaders? How can democracies slide toward dictatorship? As teachers and as scholars, historians have an obligation to help students understand the origins of our current world. For example, my iteration of History 2205W will focus on the links between personality and power of seven charismatic leaders: Franklin D. Roosevelt, Winston S. Churchill, Joseph Stalin, Adolf Hitler, John F. Kennedy, Barack H. Obama, and Donald J. Trump. How did the respective backgrounds, perspectives, aspirations, fears, patterns of behavior, patterns of emotion, and constructions of masculinity of each of these men influence how they approached power, what they tried to do – particularly in foreign policy – and the degree to which they succeeded and failed? In what ways, if at all, did these ambitious men trim their goals to fit within the democratic, normative, and other institutional constraints of their respective societies? In what ways were the cultural and political contexts in which these leaders operated similar and different? A key objective of the course will be to encourage students to think through the dilemmas imposed by 1) the need for effective leadership, especially in times of crisis, and 2) the dangers of over-reaching, authoritarian power. In concrete ways, this course aims to help students develop into more critically aware, engaged, and articulate citizens. The course will employ a wide range of materials – especially such primary materials as diaries, autobiographies, memoranda of conversations, newspaper accounts, newsreels, and video and audio recordings of speeches – to enable students to observe both the overt messages of these leaders and the more subtle signs of their assumptions and motivations. While being careful not to over-read into the sources, students will be encouraged to explore the links between personality traits, early experiences, and later patterns of behavior. For instance, the fantasized autobiography that young Winston Churchill published as the novel Savrola, explicitly links his gift for inspirational oratory with his innermost emotional frustrations. Students will be encouraged to discern the connections and contradictions between style and substance in the speeches and other expressions of leaders. In what ways was the person with power trying to manipulate opinions and shade or hide the evidence? What was being said and unsaid? What were the consequences of distortions of "fact"? The course will be offered in two formats, as a 35-student lecture and discussion course and as a 19-student W course. Learning objectives include students gaining practice in critical evaluation of primary sources and comparing them with secondary sources and in formulating their opinions orally and in written papers.

Describe course assessments	The course will require close reading and careful viewing primary materials for critical evaluation as well as reading pertinent secondary sources for background. Assessment will be based 1/3 on the 3-four page papers, 1/3 on the final ten-page paper, and 1/3 on participation in class discussion. Students will take turns in helping introduce the week's reading/viewing material. The W version of the course, as I am planning to teach it, will require students to write 3-four page papers, each focused on trying to explain the behavior and trajectory of a particular leader. How did that person gain and exercise power? To what degree was the leader constrained by institutional limits, and how did that person respond? The course will also require a 10-page paper on a comparative topic agreed upon by myself and the student. All the written work in the course will be first submitted in draft form and then revised in light of my comments. There will be no examinations in the W, seminar version of the course, but exams are likely in the non-W version. In order to receive an "A" grade, a paper must demonstrate critical thinking in evaluating primary materials, offer a well-defined and original thesis, bring evidence to bear to support that thesis, include reference to pertinent secondary sources, and be expressed in clearly written, grammatically correct prose. Footnotes and bibliography should follow University of Chicago style.
General Education Goals	This course raises students' awareness of a central challenge of out time, an issue critical if we as a society are to sustain the spirit and the vitality, and not just the form, of our democratic and republican institutions. To be sure, popular government entails some manipulation of the public, and effective government is essential, especially in times of crisis. And yet the path from democracy to dictatorship can be a slippery slope. Students will explore these themes through viewing and discussing primary and secondary materials, through writing a series of pointed essays, and then revising those essays after evaluation. The course aims to help students read and view, in a self-aware and critical way, public performances and other texts that can be packaged in a glossy, superficially attractive way. Students will be encouraged to analyze these documents in terms of the materials's cultural, gendered, racial, and class presuppositions and implicit arguments. Given the open-ended nature of this course, other instructors will enable students to explore leadership in societies and during eras very different from those of 20th-21st century Europe and the United States.
Content Area: Arts and Humanities	This course engages history in various ways, depending on the particular perspective of the instructor. For my course, the focus is on how the dilemmas and challenges of personality and power have persisted over time. The course invites students to immerse themselves in a conversation between the past and the present. The work of the courses seeks to make students aware that while history does not simply repeat itself, some lessons from the past are relevant for the present and for the future. Though limited to the United States and Europe, my version of the course nevertheless entails comparisons and contrasts across time and cultures.
Writing Competency	Students will write 3-four page papers, each focused on trying to explain the behavior and trajectory of a particular leader. How did that person gain and exercise power? To what degree was the leader constrained by institutional limits, and how did that person respond? The course will also require a ten-page paper on a comparative topic agreed upon by myself and the student. All the written work in the course will be first submitted in draft form and then revised in light of my comments. In order to receive an "A" grade, a paper must demonstrate critical thinking in evaluating primary materials, offer a well-defined and original thesis, bring evidence to bear to support that thesis, include reference to pertinent secondary sources, and be expressed in clearly written, grammatically correct prose. Footnotes and bibliography should follow University of Chicago style. Students must pass the writing portion of the course in order to pass the course.
Syllabus and other attachments	**Attachment Link** / **File Name** / **File Type** History 2205Wfinal. .pdf / History 2205Wfinal. .pdf / Syllabus History 2205W Syllabus.docx / History 2205W Syllabus.docx / Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Start	Frank Costigliola	08/26/2020 - 07:14	Submit		I am happy to answer any questions that might arise in the review process. While I understand that the various review committees have busy schedules and their own priorities, I have a special interest in hoping to teach History 2205W in the Fall of 2021. I would like to inaugurate this course in celebration of my 50th year as a professor (It will be 24 years at UConn, 26 years at URI). Frank Costigliola Board of Trustees Distinguished Professor Department of History
History	Matthew G McKenzie	08/26/2020 - 08:48	Approve	8/21/2020	Approved as per departmental review and email discussion over August, 2020. In light of those discussions, and as communicated to Frank, this proposal seeks to renumber HIST 3205 to 2205 (not delete the course), add a W section, and submit it for Gen Ed CA1 History approval.
College of Liberal Arts	Pamela Bedore	08/27/2020 - 11:07	Return	8/27/2020	Returning to proposer for change from ADD COURSE to REVISE COURSE, as per email 8.27.2020. PB.

	and Sciences					
	Return	Frank Costigliola	08/27/2020 - 15:41	Resubmit		Thank you for considering this proposal to revise HIST 3205 by widening the scope of the course, changing it to a 2000-level, and adding a W version.
	History	Matthew G McKenzie	08/28/2020 - 06:01	Approve	8/28/2020	Third time lucky. Approving as per discussions throughout August 2020.

Frank Costigliola History 2205W Monday 2:30-5:30 Fall 2021

Personality and Power since 1900

I. Introduction

This discussion and writing course analyzes the links between personality and power of seven charismatic leaders: Franklin D. Roosevelt, Winston S. Churchill, Joseph Stalin, Adolf Hitler, John F. Kennedy, Barack H. Obama, and Donald J. Trump. How did the respective backgrounds, perspectives, patterns of behavior, patterns of emotion, ambitions, and constructions of masculinity of each of these men influence how they approached power, what they tried to do – particularly in foreign policy – and the degree to which they succeeded and failed? In what ways, if at all, did these ambitious men trim their aspirations to fit within the democratic and other institutional constraints of their respective societies?

While the materials of course includes some secondary source literature for background, the bulk of what we will read and watch are primary source speeches, rallies, diaries, recorded conversations, and the observations of those who saw these leaders up close. As this is a W course, students will write three four-page papers and one ten-page final paper. Students will submit each paper first in draft form, receive it back with suggestions for revision, and then turn in a final draft. Grading will be based on the papers and on contributions to class discussion. To facilitate discussion, each week's reading or videos will be introduced by two students. Note: If you fail the writing portion of this course, you cannot pass the course.

Although this course deals with such matters as personality, emotion, and charisma, it is not a Psychology course. Nor is this course in "Psychohistory," an intellectual trend popular in the 1950s-80s that rigidly depended on Freudian psychological theory. This is instead a History course that draws on the recent "emotional turn" in the study of the past. Foreign policy aims and actions, traditionally explained in rational "realist" terms, can be decoded by looking at the emotions surrounding them. While steering clear of emotional determinism,

we can delve deeper into the thoughts, motivations, and behaviors of leaders and their advisers.

In considering emotions, we confront an inescapable dilemma. A consensus among neuroscientists and humanists holds that expressed thought is, inextricably, both emotional and rational. Although the polarity between the rational and the emotional does not accurately represent how thought actually occurs, that polarity was nevertheless a basic premise for the seven leaders we are considering and for most other observers as they reflected on what they believed they and others were analyzing, feeling, and doing. After all, since the ancient Greeks, Western thinking has most often regarded emotion and reason as polarized opposites. In other words, Western constructions of thought and the way the mind works do not coincide. Moreover, while all thought is partly emotional, some thinking is more intensely emotional. Therefore it is both necessary and useful at times – as in this course – to refer to emotions and reason as if they were separable modes of thinking.

II. Class Format

Over the fourteen-week semester we will devote two weeks to each of the seven leaders. The assigned reading and videos for Week 1 of each unit will introduce the leader with background reading and with primary source speeches, diaries, etc. We will discuss the early years, the family and societal influences, the education, the setbacks, and the paths to power of the future leader. In Week 2, we will, based on further reading and viewing, analyze the styles and substance of leadership. Two students will help present the material and offer questions for discussion.

During the semester students will write 3 four-page papers focused on how the themes of the course pertain to a particular leader (They will also write a final ten-page paper on a comparative topic agreed to by me and the student.. The four-page paper will be due on the Monday of the second week of the unit. I will return the paper with suggestions for revision on or before the Thursday of the unit. Students will submit a final draft of the paper by midnight on the Saturday of the second unit, that is, before the next unit starts on the Monday.

III. Assessment

1/3 from contributions to class discussion
1/3 from the 3 four-page papers
1/3 from the ten-page paper

In order to receive an "A" grade, a paper must demonstrate critical thinking in evaluating primary materials, offer a well-defined and original thesis, bring evidence to bear to support that thesis, include reference to pertinent secondary sources, and be expressed in clearly written, grammatically correct prose. Footnotes and bibliography should follow University of Chicago style. Students must pass the writing portion of the course in order to pass the course.

IV. Schedule of Topics and Assignments **[*Note restrictions on library usage as I am sketching out this syllabus in August 2020 preclude examination of books for specific page numbers. These will of course appear when the course is actually given.*]**

Week 1 Franklin D. Roosevelt
In class discussion of the following materials available on the HUSKYCT website
Letters archived at Roosevelt Presidential Library from his early and middle years
Manuscript diary of Dorothy Schiff, FDR close friend - excerpts
Diary of Margaret Suckley, *Roosevelt's Closest Companion* - excerpts
Costigliola, *Roosevelt's Lost Alliances* - excerpts

Week 2 Franklin D. Roosevelt
In class playing and discussion of
Video or audio recordings of Roosevelt's March 1933 Inaugural address, August 1936 Acceptance Speech, December 1941 Pearl Harbor Speech, February 1942 Fireside Chat, June 1944 D-Day Speech, March 1945 Report on the Yalta Conference

Week 3 Winston S. Churchill
In class discussion of the following materials available on the HUSKYCT website
Churchill's autobiographical novel, *Savrola* - excerpts
Churchill, *My Early Life* - excerpts
Lord Moran, *Churchill at War* [diary] - excerpts

Week 4 Winston S. Churchill

In class playing and discussion of
Video or audio recordings of selected Churchill speeches, 1940-45,
audio recording of Churchill reading his wartime memoirs

Week 5 Joseph Stalin
Molotov Remembers - excerpts
Montefiore, *Young Stalin* - excerpts
Kotkin, *Stalin* - excepts

Week 6 Joseph Stalin
In class playing and discussion of
selected Stalin's speeches [with subtitles] 1941-46
Testimony from survivors of the Gulag

Week 7 Adolf Hitler
Hitler, *Mein Kampf* - excerpts
Martin Borman, *Hitler's Table Talk* - excerpts
Volker Ullrich, *Hitler* - excerpts

Week 8 Adolf Hitler
audio or video of Hitler's speeches, including his Nuremberg rallies
audio of Hitler's "normal" conversation with Finnish leader
Testimony from survivors of the Holocaust

Week 9 John F. Kennedy
Kennedy, *Why England Slept* and *Profiles in Courage* - excerpts
Dallek, *Kennedy* - excepts
Schlesinger, *A Thousand Days* - excerpts

Week 10 John F. Kennedy
video of Kennedy's Inaugural Address in January 1961 and his American University Speech in June 1963
audio recordings of the ExComm (Executive Committee) held during the Cuban Missile Crisis of 1962

Week 11 Barack Obama

Obama, *Dreams from My Father* and *The Audacity of Hope* - excerpts
Souza and Obama, *Obama* - excerpts

Week 12 Barack Obama
video of speeches at 2004 Democratic National Convention, Inaugural Address, January 2009, and speeches at Cairo and after Sandy Hook - excerpts
Press conferences – excerpts

Week 13 Donald J. Trump
Trump, *The Art of the Deal*; Mary Trump, *Too Much and Never Enough;* Johnston, *The Making of Donald Trump* - excerpts

Week 14 Donald J. Trump
video recordings of Trump's announcing his candidacy, 2015; Inaugural Address, January 2017 [and January 2021?]; rallies, press conferences, Tweets – excerpts

2020-231 BIST Revise BIST M.A. (guest: Ming Chen)

Graduate Program Action Request	
GPAR ID	
Request Proposer	Chen
GPAR Type	Modify/Change existing degree or certificate program
Program Name	M.S. in Biostatistics
GPAR Status	In Progress

Type of Request		
Type of Program Action Request	Modify/Change existing degree or certificate program	
Type of Modify/Change action	Change program requirements and/or Graduate Catalog Copy	
What academic and/or administrative units (e.g. Schools/Colleges or departments) oversee and hence must approve this proposal?	**School / College**	**Department**
	College of Liberal Arts and Sciences	Statistics

Program Information	
Name of existing degree or certificate program to be modified	M.S. in Biostatistics
Campus / Locations where the program is currently offered	Storrs

Request Information	
Current Catalog Copy (include only sections being revised)	Structure of the Program: A student should take at least ten (10) 3-credit courses and the 1-credit seminar/intern course BIST 5099. The following nine (9) courses are required: BIST 5099. Investigation of Special Topics, Student Seminar BIST 5505. Applied Statistics I BIST 5605. Applied Statistics II BIST 5585. Mathematical Statistics I BIST 5685. Mathematical Statistics II BIST 5215. Statistical Consulting BIST 5225. Data Management

	and Programming in SAS and R BIST 5515. Design of Experiment BIST 5625. Introduction to Biostatistics Two (2) elective courses should be chosen from the following courses, with one of them required to be BIST 5635 Clinical Trials, BIST 5645 Concepts and Analysis of Survival Data, or BIST 5655 Epidemiology: BIST 3965. Elementary Stochastic Processes BIST 5361. Statistical Computing BIST 5525. Sampling Theory BIST 5535. Nonparametric Methods BIST 5615. Categorical Data Analysis BIST 5635. Clinical Trials BIST 5645. Concepts and Analysis of Survival Data BIST 5655. Epidemiology BIST 5665. Applied Multivariate Analysis BIST 5675. Bayesian Data Analysis BIST 5705. Statistical Methods in Bioinformatics BIST 5725. Linear Models I BIST 5815. Longitudinal Data Analysis BIST 5825. Applied Time Series Depending on how long a student plans to take to complete the Master's program, the following are recommended sequences of courses. Three Semesters BIST 5505, BIST 5585, BIST 5625, BIST 5225 BIST 5515, BIST 5605, BIST 5685, BIST 5099 or Elective BIST 5215, BIST 5099 or Elective, 1 Elective course Four Semesters BIST 5505, BIST 5585, BIST 5625 BIST 5605, BIST 5515, 1 Elective course BIST 5225, BIST 5099 or Elective, 1 Elective course BIST 5685, BIST 5215, BIST 5099 or Elective
Proposed new catalog copy (to replace the above current catalog copy)	A student should take at least ten (10) 3-credit courses and the 1-credit seminar/intern course BIST 5099. The following nine (9) courses are required: BIST 5099. Biostatistics Practice BIST 5505. Applied Statistics I BIST 5605. Applied Statistics II BIST 5585. Mathematical Statistics I BIST 5685. Mathematical Statistics II BIST 5215. Statistical Consulting BIST 5225. Data Management and Programming in SAS and R BIST 5625. Introduction to Biostatistics BIST 5635. Clinical Trials Two (2) elective courses should be chosen from the following courses, with one of them required to be BIST 5645 Concepts and Analysis of Survival Data, or BIST 5655 Epidemiology or BIST 5615 Categorical Data Analysis: BIST 5615. Categorical Data Analysis BIST 5515. Design of Experiment BIST 5645. Concepts and Analysis of Survival Data BIST 5655. Epidemiology BIST 5705. Statistical Methods in Bioinformatics BIST 5815. Longitudinal Data Analysis Depending on how long a student plans to take to complete the Master's program, the following are recommended sequences of courses. Three Semesters BIST 5505, BIST 5585, BIST 5625, BIST 5225 BIST 5605, BIST 5635, BIST 5685, BIST 5099 or Elective BIST 5215, BIST 5099 or Elective, 1 Elective course Four Semesters BIST 5505, BIST 5585, BIST 5625 BIST 5605, BIST 5635, 1 Elective course BIST 5225, BIST 5099 or Elective, 1 Elective course BIST 5685, BIST 5215, BIST 5099 or Elective
Explanation / Justification	(A) Summary of the changes (A.1) In the required nine (9) courses are required, we propose to replace BIST 5515. Design of Experiment by BIST 5635. Clinical Trials as the latter is a more BIST specialized course. (A.2) We have moved BIST 5515. Design of Experiment to the category: one of two elective courses. (A.3) We have moved BIST 5615 Categorical Data Analysis to the category, one of 2 elective courses, to replace BIST 5635. Clinical Trials since BIST 5635. Clinical Trials becomes a required course now. (A.4) The following courses BIST 3965. Elementary Stochastic Processes BIST 5361. Statistical Computing BIST 5525. Sampling Theory BIST 5535. Nonparametric Methods BIST 5665. Applied Multivariate Analysis BIST 5675. Bayesian Data Analysis BIST 5725. Linear Models I BIST 5825. Applied Time Series will be no longer cross-listed with STAT 3965. Elementary Stochastic Processes STAT 5361. Statistical Computing STAT 5525. Sampling Theory STAT 5535. Nonparametric Methods STAT5665. Applied Multivariate Analysis STAT 5675. Bayesian Data Analysis STAT 5725. Linear Models I STAT 5825. Applied Time Series. Thus, these courses are no longer existent and thus they are removed from the list of courses for the required one of 2 elective courses for the BIST MS. (A.5) The following courses BIST 5615 Categorical Data Analysis BIST 5625 Introduction to Biostatistics BIST 5635 Clinical Trials BIST 5645 Concepts and Analysis of Survival Data BIST 5655 Epidemiology BIST 5705 Statistical Methods in Bioinformatics BIST 5815 Longitudinal Data Analysis are no longer cross-listed with STAT for STAT MS. These specialized BIST courses are reserved for the BIST MS program only. (A.6) In the recommended sequences of courses, we have made only one change in each, i.e., replacing BIST 5515 by BIST 5635. (B) Justification and Additional Information (B.1) The program requirement for the M.S. in Biostatistics basically remains the same. (B.2) The proposed change in the plan of study for BIST MS is to reduce the overlap with STAT MS. (B.3) The proposed new catalog consists of the specialized BIST only courses now. (B.4) The proposed change was initiated by the CLAS Dean office and the graduate school. (B.5) The proposed change was voted and approved by the faculty of the Department of Statistics on July 15, 2020. (B.6) The proposed change was reviewed and approved by CLAS Associate Deans: Moiseff, Andrew and Park Boush, Lisa on August 4, 2020.

Contact Information	
Initiator Last Name	Chen
Initiator First Name	Ming-Hui
Initiator Department	Statistics
Initiator Email	ming-hui.chen@uconn.edu
Initiator Phone Number	860-486-4196
Program Director Name	Ming-Hui Chen
Program Director Title/Status	Department Head/Associate Department Head
Program Director Phone Number	860-486-4196
Program Director Email	ming-hui.chen@uconn.edu
The Administrative Contact is the same as the Program Director	No
Administrative Contact Name	Tracy Burke
Administrative Contact Phone Number	860-486-3413
Administrative Contact Email	tracy.burke@uconn.edu

Activity Log	
Activity Log	No Activity Log entries to display

2020-232 BIST/STAT 5095 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2514
Request Proposer	Lachos Davila
Course Title	Investigation of Special Topics
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	1
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Title	Investigation of Special Topics
Course Number	5099
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is revise course of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	01
Instructional Pattern	Seminar/intern course

COURSE RESTRICTIONS	
Prerequisites	None
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5099. Investigation of Special Topics 1.00 credit Prerequisites: None Grading Basis: Graded Topical seminar course
Provide proposed title and complete course catalog copy	STAT 5095. Investigation of Special Topics 1.00 credit Prerequisites: None Grading Basis: Graded Topical seminar course
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office. BIST 5095 is being proposed as a new course. The number is being changed from xx99 to xx95 in accordance with Senate guidelines.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	It is a participating seminar course. Each Ph.D. student is required to make a fifty-minutes presentation on a statistics topic that may be a description of your summer internship experience, a topic of your current research, or a discussion of a journal article. The STAT MS students can form a team of 2 persons each to make the presentation.
Describe course assessments	Presentations and reading of statistical articles.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** syllabusSTAT5099.docx | syllabusSTAT5099.docx | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/21/2020 - 08:03	Submit		This submission is part of the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program

	Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:29	Approve		none
	College of Liberal Arts and Sciences	Pamela Bedore	09/01/2020 - 16:11	Return	9/1/2020	Returning to proposer as per email 9.1.2020. PB.
	Return	Victor Hugo Lachos Davila	09/01/2020 - 16:41	Resubmit		Observations were corrected
	Statistics	Victor Hugo Lachos Davila	09/01/2020 - 16:43	Approve	9/1/2020	none

2020-233 BIST/STAT 5125 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2554
Request Proposer	Lachos Davila
Course Title	Computing for Statistical Data Science
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Computing for Statistical Data Science
Course Number	5125
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Introductory course in mathematical and applied statistics; introductory course in programming.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	Instructor Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5125. Computing for Statistical Data Science 3.00 credits Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming. Instructor consent required. Grading Basis: Graded Principles and practice of statistical computing in data science: data structure, data programming, data visualization, simulation, resampling methods, distributed computing, and project management tools. Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming.
Provide proposed title and complete course catalog copy	STAT 5125. Computing for Statistical Data Science 3.00 credits Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming. Instructor consent required.. Grading Basis: Graded Principles and practice of statistical computing in data science: data structure, data programming, data visualization, simulation, resampling methods, distributed computing, and project management tools. Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of	The course will provide a broad overview of principles and practices in statistical programming for data scientists. It will cover practical computational tools such as data acquisition and management, advanced visualization methods, text mining, cluster computing, and working collaboratively with other developers. It will also cover statistical

course goals and learning objectives	methods for data science such as regression models, dealing with dependent data (e.g. time-series, clustered data), and resampling and simulation methods
Describe course assessments	Homework, exams, and a course project is recommended.
Syllabus and other attachments	

Attachment Link	File Name	File Type
STAT5125compDataSci-syllabus.docx	STAT5125compDataSci-syllabus.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 08:43	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:44	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 17:29	Return	9/3/2020	Returning to proposer for approval from both units for un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 18:55	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:57	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:57	Approve	9/3/2020	BIST

Computing for Statistical Data Science - STAT 5125

Instructor:

Prerequisites: Introductory course in mathematical and applied statistics; introductory course in programming. Instructor consent required.

Course objectives: The course will provide a broad overview of principles and practices in statistical programming for data scientists. It will cover practical computational tools such as data acquisition and management, advanced visualization methods, text mining, cluster computing, and working collaboratively with other developers. It will also cover statistical methods for data science such as regression models, dealing with dependent data (e.g. time-series, clustered data), and resampling and simulation methods. The course will also emphasize how to convey results from these methods effectively to people with little or no background in statistics. Students who complete the course

successfully will be proficient in current statistical computing languages, data management methods, and working in a distributed and collaborative development environment.

The approach in this class is to learn by doing. Like any topic, and especially when learning a new language it is critical to practice a lot and often.

Recommended Text: There is no required text book. Reading material will be pro- vided to the students via HuskyCT or as a reference to online documents.

Course Materials: Lecture notes, assignments, sample code, datasets, and other course material will be posted on the HuskyCT course website (available through `https://lms.uconn.edu/`). Please visit this site often to ensure timely obtainment of materials. The lecture notes will be available online before each class.

Software: We will use R, which is freely available for download at `http://www.r-project.org/`, and the RStudio development environment, which is freely available at `https://www.rstudio.com/products/rstudio/download/`. Other software languages, as well as specialized packages will be taught (e.g. Python, SQL, etc.)

Course Activities & Grading:

- Homework
  - At least 8 homework assignments will be given during the semester. Students may consult amongst themselves or with the instructor, but **each student must submit his/her own work**.
  - No credit will be given for submitted assignments exhibiting duplication or copying of solutions (from peers or existing solutions).

  - All completed assignments are to be submitted by the due date, without exception.
  - All homework assignments must be typed and submitted through the HuskyCT course website. **Students may submit each assignment only once.**

- Participation: We will have 'active learning' in the classroom via discussion, Q&A, and problem solving. You **must** read the material (reading from the text and notes posted on the course HuksyCT site) before coming to class, and participate. There will be pop quizzes and the dates will be randomly selected.
- Assignment grading: homework and class assignments will be checked by the grader, but on occasion students will be required to evaluate each other's work. More detailed about the process will be provided separately during the first week.
- There will be a final project due on the last week of classes. More details about the project will be provided separately.

The grades will be assigned as follows:

Homework Assignments	30%
Participation/Quizzes	20%
Final Project	50%

NOTE: This course adheres to the policies from the University Senate, the Office of Institutional Equity, the Office of the Provost, and Community Standards.
See http://provost.uconn.edu/syllabi-references for moreinformation.

2020-234 BIST/STAT 5215 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2435
Request Proposer	Lachos Davila
Course Title	Statistical Consulting
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Course content will always be appropriate for both subjects

Course Title	Statistical Consulting
Course Number	5215
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is revise course of an existing course of the stat department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	STAT/BIST 5315, STAT/BIST 5505, and STAT/BIST 5605 or instructor consent.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	STAT/BIST 5215. Statistical Consulting 3.00 credits Prerequisites: STAT 5315, STAT 5505, STAT 5605 and STAT 5725, or instructor consent. Grading Basis: Graded Applied inference for academia, government, and industry: ethical guidelines, observational studies, surveys, clinical trials, designed experiments, data management, aspects of verbal and written communication, case studies.
Provide proposed title and complete course catalog copy	STAT/BIST 5215. Statistical Consulting 3.00 credits Prerequisites: STAT/BIST 5315, STAT/BIST 5505, and STAT/BIST 5605, or instructor consent. Grading Basis: Graded Applied inference for academia, government, and industry: ethical guidelines, observational studies, surveys, clinical trials, designed experiments, data management, aspects of verbal and written communication, case studies.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	This is a project-based course designed to introduce the basics of a statistical consulting process. The students will learn about the human side (non-statistical aspect) of statistical consulting which includes: the role of the consultant; conducting meetings with clients; interpersonal and communication skills (written and verbal); interaction with clients; principles of good consulting practice - learning to critique consulting sessions; ethics, professional conducts, and authorship. The statistical aspects of the course include: design an experiment that fits the need of the clients, power and interval-width based sample size determination; data handling, data validation and summary data descriptions; quality graphical display, statistical modeling with clear statements of assumptions made. Special lectures from invited guests may be scheduled during the semester. Students may meet with clients, analyze the dataset provided by the client, produce a summary report, give recommendations and present the results to their peers.
Describe course assessments	Homework, quizzes, presentations, class discussion, and a consulting/course project are recommended.
Syllabus and other attachments	**Attachment Link** / **File Name** / **File Type**: syllabusSTAT5215.docx / syllabusSTAT5215.docx / Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/17/2020 - 14:54	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:32	Approve		None
Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:35	Approve		None
College of Liberal Arts and Sciences	Pamela Bedore	09/01/2020 - 16:10	Return	9/1/2020	Returning to proposer as per email 9.1.2020. PB.
Return	Victor Hugo Lachos Davila	09/01/2020 - 16:32	Resubmit		Observations were corrected
Statistics	Victor Hugo Lachos Davila	09/01/2020 - 16:35	Approve	9/1/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/01/2020 - 16:36	Approve	9/1/2020	BIST

STAT/BIST 5215
Statistical Consulting

Prerequisite: STAT/BIST 5515 or STAT 5315, STAT/BIST 5505/5605; or instructor's consent.

Topics: This is a project-based course designed to introduce the basics of a statistical consulting process. The students will learn about the human side (non-statistical aspect) of statistical consulting which includes: the role of the consultant; conducting meetings with clients; interpersonal and communication skills (written and verbal); interaction with clients; principles of good consulting practice - learning to critique consulting sessions; ethics, professional conducts, and authorships.
The statistical aspects of the course include: design an experiment that fits the need of the clients, power and interval-width based sample size determination; data handling, data validation and summary data descriptions; quality graphical display, statistical modeling with clear statements of assumptions made.
Special lectures from invited guests may be scheduled during the semester. Students may meet with clients, analyze the dataset provided by the client, produce a summary report, give recommendations and present the results to their peers.

Recommended Text:

- *Statistical Consulting*. Javier Cabrera and Andrew McDougall (2002). Springer-Verlag. ISBN: 0-387-98863-7
  Websites:
  http://www.csam.montclair.edu/~mcdougal/zBook/book.html
  http://webcache.googleusercontent.com/search?q=cache:http://pages.csam.montclair.edu/~mcdougal/zBook/book.html
  http://www.rci.rutgers.edu/~cabrera/sc/
- *Statistical Consulting: A Guide to Effective Communication*. Janice Derr (1999). Duxbury Press. ISBN: 0-534-36228-1.

Additional books:
The Human Side of Statistical Consulting. James R. Boen and Douglas A. Zahn (1982).
Statistical Case Studies: A Collaboration Between Academe and Industry. Roxy Peck, Larry D. Haugh, and Arnold Goodman (1998). SIAM.
Problem Solving: A Statistician's Guide. Chris Chateld (1995). Second Edition. Chapman & Hall.
Practical Data Analysis for Designed Experiments. Brian S. Yandell (1997). Chapman & Hall.

Additional Useful Resources

- The ASA Statistical Consulting Section at http://community.amstat.org/cnsl/home and then click on “Resources > Useful Books and Journals”.
- North American Statistical Collaboration and Consulting Centers and Labs, at http://www.lisa.stat.vt.edu/?q=north_american_stat_labs
- ASA Ethical Guidelines for Statistical Practice: http://www.amstat.org/asa/files/pdfs/EthicalGuidelines.pdf
- http://www.ats.ucla.edu/stat/seminars/

Software: We will use mostly SAS and R, but other software tools may be used or demonstrated. SAS is available via Skybox (Virtual PC) http://skybox.uconn.edu/ or in computing labs at UConn, as well as in the teaching lab in the department of statistics during scheduled hours). R is available from http://www.r-project.org/ and RStudio Desktop (the free version) from https://www.rstudio.com/products/rstudio/download/

Course Materials: assignments, sample code, datasets, and other course material will be posted on the HuskyCT course website (available through https://learn.uconn.edu/). Please visit this site often to ensure timely obtainment of materials.

Assignments: Homework, pop quizzes, reading assignments, analysis and discussion of case studies, individual and group projects. There may be presentations from the SCS team, researchers, or other speakers.

Grading policy: grades will be determined based on participation and performance in the following activities:
Homework assignments;
Pop quizzes;
Class discussions;
Class presentations;
Consulting projects or class projects; and Project reports.

This course adheres to the policies from the University Senate, the Office of Institutional Equity, the Office of the Provost, and Community Standards. Please read http://provost.uconn.edu/syllabi-references for more information.

2020-235 BIST/STAT 5225 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2454
Request Proposer	Lachos Davila
Course Title	Data Management and Programming in R and SAS
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Course content will always be appropriate for both subjects
Course Title	Data Management and Programming in R and SAS
Course Number	5225
Will this use an existing course number?	Yes
Please explain the use of existing course number	type of actiosn is revise course of an existing course of the Stat Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	STAT/BIST 5505 and STAT/BIST 5605, or instructor consent.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No

What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5225. Data Management and Programming in R and SAS 3.00 credits Prerequisites: STAT 5505 and 5605, or instructor consent. Grading Basis: Graded Creation and management of datasets for statistical analysis: software tools and databases, user-defined functions, importing/exporting/manipulation of data, conditional and iterative processing, generation of reports.
Provide proposed title and complete course catalog copy	STAT/BIST 5225. Data Management and Programming in R and SAS 3.00 credits Prerequisites: STAT/BIST 5505 and STAT/BIST 5605, or instructor consent. Grading Basis: Graded Creation and management of datasets for statistical analysis: software tools and databases, user-defined functions, importing/exporting/manipulation of data, conditional and iterative processing, generation of reports.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	At the end of the course, students should be proficient in SAS and R, and be able to 1) Create and manage datasets.2) Write user-dened functions.3) Create customized reports and graphs
Describe course assessments	Homework, quizzes, exams, and course project are recommended.
Syllabus and other attachments	See table below

Attachment Link	File Name	File Type
syllabusSTATBIST5225.docx	syllabusSTATBIST5225.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/19/2020 - 10:25	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:40	Approve		STAT
Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:40	Approve		BIST
College of Liberal Arts and Sciences	Pamela Bedore	09/01/2020 - 16:10	Return	9/1/2020	Returning to proposer as per email 9.1.2020. PB.
Return	Victor Hugo Lachos Davila	09/01/2020 - 16:44	Resubmit		Suggested modifications included

	Statistics	Victor Hugo Lachos Davila	09/01/2020 - 16:55	Approve	9/1/2020	STAT
	Statistics	Victor Hugo Lachos Davila	09/01/2020 - 17:05	Approve	9/1/2020	BIST

Data Management in SAS and R – BIST/STAT 5225

Updated August 30, 2020

Course Description

In today's world most academic and industrial research is data-driven and is based on statistical methods. Thus, many scientists, not just statisticians, must have strong analytical and computational skills. This course covers data management andcomputa- tional techniques in detail. You are strongly encouraged to choose advanced courses in statistical inference, in addition to this class.

We will use two very popular programming languages, namely SAS and R. Both lan- guages are very powerful general-purpose programming platforms and include advanced tools for a wide range of statistical analyses.

The approach in this class is to learn by doing. Like any topic, and especially when learning a new language it is critical to practice a lot and often.

Course Objectives

At the end of the course, students should be proficient in SAS and R, and be able to

- Create and manage datasets.
- Write user-defined functions.
- Create customized reports and graphs.

Recommended Text

1. **Learning SAS by Example: A Programmer's Guide.** *Ron Cody*, 2007. Cary, NC: SAS Institute Inc.

The course structure will follow the order of the chapters in this book.

2. **R in Action, Data analysis and graphics with R (second edition)**. *Robert I. Kabacoff*, 2015. Manning Publications Co.

3. **The Little SAS Book: A Primer, (Fifth Edition)**. *Lora D. Delwiche and Susan J. Slaughter*,

2012. Cary, NC: SAS Institute Inc.

Many online resources are available. For example:

- https://www.r-project.org/other-docs.html
- https://support.sas.com/en/documentation.html

UCLA's Statistical Computing website offers excellent tutorials/resources for SAS and R (and other languages): www.ats.ucla.edu/stat/.

Course Materials

Lecture notes, assignments, sample code, datasets, and other course material will be posted on the HuskyCT course website (available through https://lms.uconn.edu/). Please visit this site often to ensure timely obtainment of materials. The lecture notes will be available online before each class.

Software:

SAS (v 9.4); SAS ODS, BASE, PROCEDURES, STAT, GRAPHICS, IML, and MACRO will be used. Available for (free) use through

-library (HBL, level 1).

-Skybox (Virtual PC): http://skybox.uconn.edu/

- R: freely available for download at http://www.r-project.org/.
- RStudio: freely available at https://www.rstudio.com/products/rstudio/download/

Course Activities & Grading:

- Homework
  - At least 8-11 homeworks will be assigned during the semester. Students may consult amongst themselves or with the instructor, but **each student must submit his/her own work**.
  - No credit will be given for submitted assignments exhibiting duplication or copying of solutions (from peers or existing solutions).
  - All completed assignments are to be submitted by the due date, without exception.
  - All homework assignments must be typed and submitted through the HuskyCT course website. **Students may submit each assignment only once.**

Participation: We will have 'active learning' in the classroom via discussion, Q&A, and problem solving. You **must** read the material (reading from the text and notes posted on the course HuksyCT site) before coming to class, and participate. There will be pop quizzes and the dates will be randomly selected.

Assignment grading: homework and class assignments will be checked by the grader, but on occasion students will be required to evaluate each other's work. More detailed about the process will be provided separately during the first week.

There will be one in-class midterm exam on Thursday, March 14, 2019 (tentative date).

There will be a final project due on Sunday, May 5, 2019. More details about the project will be provided separately.

Students are encouraged to take the SAS certification exam (Programming 1). If you already obtained a certificate, bring me the official copy. If you haven't obtained a Programming 1 SAS certificate, it is now possible to take it online: 'Online proctored (OP) exams allow you to conveniently and easily take an exam in the comfort of your home or office while being monitored by an offsite proc- tor. All communication with the proctor is done in English. For more info: https://home.pearsonvue.com/sas/op '. Taking the Programming 1 SAS certifi- cation exam is optional. Passing it will be worth 5 extra credit points toward the final grade. To get the credit you must show me the official certification from SAS by May 1, 2019.
Note - you can only get this extra credit for the Programming 1 certificate. If you already obtained a higher level certification from SAS, you may want to consider choosing a different course.

The grades will be assigned as follows:

Homework Assignments	20%
Participation/Quizzes	20%
Midterm Exam	30%
Final Project	30%

Optional SAS certification Exam (Programming 1) = 5% extra credit. The letter grades will be assigned based on the following cut-offs:

< 60	[60, 63)	[63, 67)	[67, 70)	[70, 73)	[73, 77)	[77, 80)
F	D-	D	D+	C-	C	C+
	[80, 83)	[83, 67)	[87, 90)	[90, 93)	[93, 97)	[97, 100)
	B-	B	B+	A-	A	A+

In order to obtain a good course grade, students must successfully complete all home- work assignments, the course project, the mid-term exam, the final project, attend every lecture, and actively participate in class.

Tentative order of topics:

Topic	Reading*
Introduction	Ch 1 & 2
Reading raw data from external files	Ch 3
Creating permanent data sets	Ch 4
Creating formats and labels	Ch 5
Reading and writing data from Excel	Ch 6
Performing conditional processing	Ch 7
Performing iterative processing	Ch 8
Working with dates	Ch 9
Subsetting and combining data sets	Ch 10
Numeric functions	Ch 11
Character functions	Ch 12
Arrays	Ch 13
Displaying the data, customized reports, summarizing data	Ch 14-16
Counting frequencies, creating tabular reports	Ch 17-18
Generating graphs	Ch 19-20
Advanced topics (TBD)	

*Reading chapters refer to those in Ron Cody's book.

NOTE: This course adheres to the policies from the University Senate, the Office of Institutional Equity, the Office of the Provost, and Community Standards.
See http://provost.uconn.edu/syllabi-references for moreinformation.

2020-236 BIST/STAT 5361 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2535
Request Proposer	Lachos Davila
Course Title	Statistical Computing
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics

Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Statistical Computing
Course Number	5361
Will this use an existing course number?	Yes
Please explain the use of existing course number	Type of action is revise course of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Statistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/ BIST 5361. Statistical Computing 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Use of computing for statistical problems; obtaining features of distributions, fitting models and implementing inference. Basic numerical methods, nonlinear statistical methods, numerical integration, modern simulation methods

Provide proposed title and complete course catalog copy	STAT 5361. Statistical Computing 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Use of computing for statistical problems; obtaining features of distributions, fitting models and implementing inference. Basic numerical methods, nonlinear statistical methods, numerical integration, modern simulation methods.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to use modern computing statistics methods in real problems.
Describe course assessments	Homework, quizzes, exams, and a course project is recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** syllabus-STAT5361.pdf | syllabus-STAT5361.pdf | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 08:59	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:48	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 14:41	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 18:59	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:00	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:00	Approve	9/3/2020	BIST

2020-237 BIST/STAT 5505 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST

CAR ID	20-2434
Request Proposer	Lachos Davila
Course Title	Applied Statistics I
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO

Type of Action	Revise Course

Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Course content will always be appropriate for both subjects
Course Title	Applied Statistics I
Course Number	5505
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is just a revise course of an existing course.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Statistics and Biostatistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs

If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	STAT/BIST 5505. Applied Statistics I 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission. Grading Basis: Graded Exploratory data analysis: stem-and leaf plots, Box-plots, symmetry plots, quantile plots, transformations, discrete and continuous distributions, goodness of fit tests, parametric and non-parametric inference for one sample and two sample problems, robust estimation, Monte Carlo inference, bootstrapping.
Provide proposed title and complete course catalog copy	STAT/BIST 5505. Applied Statistics I 3.00 credits Prerequisites: Open to graduate students in Statistics and Biostatistics, others with permission. Grading Basis: Graded Exploratory data analysis: stem-and leaf plots, Box-plots, symmetry plots, quantile plots, transformations, discrete and continuous distributions, goodness of fit tests, parametric and non-parametric inference for one sample and two sample problems, robust estimation, Monte Carlo inference, bootstrapping.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	At the end of the course, students should be able to 1) Apply graphical methods for exploratory data analysis. 2)Demonstrate comprehensive knowledge of univariate and multivariate data distributions, one-, two-, and k-sample analyses, parametric and nonparametric methods, jackknifing and bootstrapping, and categorical data analyses. 3) Conduct statistical analyses using SAS and R computer packages.
Describe course assessments	Homework, quizzes, exams, and a course project is recommended.
Syllabus and other attachments	**Attachment Link**: syllabusSTAT5505AppliedI.docx; **File Name**: syllabusSTAT5505AppliedI.docx; **File Type**: Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/17/2020 - 14:46	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:42	Approve		BIST
Statistics	Victor Hugo Lachos Davila	08/31/2020 - 23:43	Approve		STAT
College of Liberal Arts and Sciences	Pamela Bedore	09/01/2020 - 16:09	Return	9/1/2020	Returning to proposer for revisions as per email 9.1.2020. PB.
Return	Victor Hugo Lachos Davila	09/01/2020 - 16:20	Resubmit		The observations were corrected
Statistics	Victor Hugo Lachos Davila	09/01/2020 - 16:26	Approve	9/1/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/01/2020 - 16:31	Approve	9/1/2020	BIST

Applied Statistics I – BIST/STAT5505

Course Description (STAT5505-5605):
Statistics from a data analytic viewpoint incorporating parametric and nonparametric meth- ods, exploratory data analysis, graphical methods, one-sample problems, jackknifing, boot- strapping, robustness, two-sample problems, k-sample problems including one-way ANOVA, randomized block designs, two-way ANOVA, additivity, simple linear regression, multiple linear regression, analysis of covariance, and categorical data.

Course Objectives:

This is the first part of a sequence course (STAT5505 and STAT5605). At the end of the course, students should be able to

- Apply graphical methods for exploratory data analysis.
- Demonstrate comprehensive knowledge of univariate and multivariate data distribu- tions, one-, two-, and k-sample analyses, parametric and nonparametric methods, jack- knifing and bootstrapping, and categorical data analyses.
- Conduct statistical analyses using SAS and R computer packages.

Reference Text:

1. **Special Notes** in pdf files, prepared by Professor Nalini Ravishanker, posted on the HuskyCT course website (available through https://lms.uconn.edu/).
2. *Statistical Methods*. Snedecor and Cochran, 1989. Iowa State University Press.
3. *Graphical Methods for Data Analysis*. Chambers et al. 1983. Chapman & Hall.
4. *An Introduction to Categorical Data Analysis*, 3rd Edition. Agresti, A. Wiley, 2013.

Course Materials:

Lecture notes, assignments, sample code, datasets, and other course material will be posted on the HuskyCT course website (available through https://lms.uconn.edu/).
Please visit this site often to ensure timely obtainment of materials. The lecture notes will be available online before each class.

Software:

- SAS (v≥9.4); SAS ODS, BASE, PROCEDURES, STAT, GRAPHICS, IML, and MACRO will be used. Available for (free) use through

  -library (HBL, level 1).

  -Skybox (Virtual PC): http://skybox.uconn.edu/

- R: freely available for download at http://www.r-project.org/.

NOTE: UCLA's Statistical Computing website offers excellent tutorials/resources for SAS and R (and other languages): www.ats.ucla.edu/stat/.

Course Activities & Grading:

- Homework
  - Approximately 9-12 homeworks will be assigned during the semester. Students may consult amongst themselves or with the instructor, but each student must submit his/her own work.
  - All homework assignments are to be typed in Word or pdf documents, formatted according to the grader's instructions (posted on HuskyCT course website), and submitted through the HuskyCT course website. **Students may submit each assignment only once.**
  - All completed assignments are to be submitted by the due date. Assignments will be accepted late up to 2 days beyond the due date, but with penalty. Late submissions within the 2-day grace period will only be worth 50% - 95% of the points. Submissions beyond 2 days will not be graded and will receive no credit.
  - No credit will be given for submitted assignments exhibiting duplication or copy- ing of solutions (from peers or existing solutions).

- Participation: We will have "active learning" in the classroom via discussion, Q&A, and problem solving. You must read the material (reading from the text and notes posted on the course HuksyCT site) before coming to class, and participate. There will be pop quizzes and the dates will be randomly selected.

- There will be one midterm exam: 6:00pm - 8:30pm, Monday, October 22, 2018, in GENT 131, and one final exam.

  The final exam will be given during final exam week according to the school scheduled date. Final exam week for Fall 2018 takes place from Monday, December 10th through Sunday, December 16, 2017. Students are required to be available for their exam during the stated time. If you have a conflict with this time, you must visit the Dean of Students Office to discuss the possibility of rescheduling this exam.

  Please note that vacations, previously purchased tickets or reservations, social events, misreading the exam schedule and over-sleeping are not viable excuses for missing a final exam. If you think that your situation warrants permission to reschedule, please contact the Dean of Students Office with any questions.

- There will be one small project assigned after the midterm, due by 11:59pm, Friday, December 7, 2018.

The grades will be assigned as follows:

Homework Assignments	25%
Participation/Quizzes	5%
Small Project	5%
Midterm Exam	30%
Final Exam	35%

This grade assignment requires a passing grade in each exam, else the final course grade is up to the discretion of the instructor. In order to obtain a good course grade, students must successfully complete all homework assignments, the course project, the mid-term exam, and the final exam; attend every lecture; and actively participate in class.

2020-238 BIST/STAT 5525 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2555
Request Proposer	Lachos Davila
Course Title	Sampling Theory
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Sampling Theory
Course Number	5525
Will this use an existing course number?	Yes
Please explain the use of existing course number	Type of action is revise course of an existing course of the Stat Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Statistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5525. Sampling Theory 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Sampling and nonsampling error, bias, sampling design, simple random sampling, sampling with unequal probabilities, stratified sampling, optimum allocation, proportional allocation, ratio estimators, regression estimators, super population approaches, inference in finite populations.
Provide proposed title and complete course catalog copy	STAT 5525. Sampling Theory 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Sampling and nonsampling error, bias, sampling design, simple random sampling, sampling with unequal probabilities, stratified sampling, optimum allocation, proportional allocation, ratio estimators, regression estimators, super population approaches, inference in finite populations.
Reason for the course action	Proposal for Changing Cross-listed Graduate Courses and Plans of Study for BIST and STAT MS Program. The proposal has been approved by the Statistics Department and the Dean office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Sampling is everywhere in our daily statistical life. From news articles to financial reports to scientific publications, people need to use various sampling techniques to obtain data, mostly through surveys, to accurately describe a target population. Sampling theory is important in that respect to help us achieve better design and analysis of surveys. See how the U.S. Census Bureau uses sampling theory in their everyday work to design and conduct surveys and censuses in this recent talk.
Describe course assessments	Homework, quizzes, exams, and a course project is recommended.

Syllabus and other attachments	Attachment Link	File Name	File Type
	STAT5525syllabusSamplingTheory.docx	STAT5525syllabusSamplingTheory.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 09:10	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:49	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 14:38	Return	9/3/2020	Returning to proposer for approval from both units on un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 19:02	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:03	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:03	Approve	9/3/2020	BIST

STAT 5525

Sampling Theory

Yuwen Gu

2020

SYLLABUS

1Course Description

Sampling is everywhere in our daily statistical life. From news articles to financial reports to scientific publications, people need to use various sampling techniques to obtain data, mostly through surveys, to accurately describe a target population. Sampling theory is important in that respect to help us achieve better design and analysis of surveys. See how the U.S. Census Bureau uses sampling theory in their everyday work to design and conduct surveys and censuses in this recent talk (see linked slides).

Topics covered in this course include:

> sampling and nonsampling errors, sample designs, simple random sampling, sampling with unequal probabilities, stratified sampling, optimum allocation, proportional allocation, ratio estimators, regression estimators, super population approaches, and inferences in finite populations.

Statistical software will be used to apply many of the techniques covered by this course.

2Course Prerequisite

The official course prerequisite is STAT 3445–*Introduction to Mathematical Statistics,* so the following concepts should sound familiar to you:

> Probability spaces, distributions in one and several dimensions, generating functions, limit theorems, sampling distributions, parameter estimation, Neyman-Pearson theory of hypothesis testing, correlation, regression, analysis of variance.

3Course Information

- **INSTRUCTOR**
- **–Lectures** :

  –Classroom :

  –Office hours

  –Office :

  –HuskyCT site (Blackboard) :https://huskyct.uconn.edu/

- **GRADER**:

1

4Course Materials

- **Textbooks**
  1. Scheaffer, R.L., Mendenhall III, W., Ott, R.L. and Gerow, K.G., 2011 (7th Edition). *Elementary survey sampling.* Cengage Learning (Required for both **undergraduate** and **graduate** sections)
  2. Govindarajulu, Z., 1999. *Elements of sampling theory and methods.* Prentice Hall (Recommended for **graduate** section)
- **References** (NOT required)
  1. Lohr, S., 2009 (2nd Edition). *Sampling: design and analysis.* Cengage Learning
  2. Levy, P.S. and Lemeshow, S., 2008 (4th Edition). *Sampling of populations: methods and applications.* Wiley
  3. Groves, R.M., Fowler Jr, F.J., Couper, M.P., Lepkowski, J.M., Singer, E. and Tourangeau, R., 2009 (2nd Edition). *Survey methodology.* Wiley
  4. Rea, L.M. and Parker, R.A., 2014. *Designing and conducting survey research: A comprehensive guide.* Wiley
  5. Valliant, R., Dever, J.A. and Kreuter, F., 2013. *Practical tools for designing and weighting survey samples.* Springer

5Computing

This course does not require extensive computing, but there will be some calculations needed. You are welcome to use a programmable calculator, or the statistical computing package of your choice. The textbook website

http://www.cengage.com/cgi-wadsworth/course_products_wp.pl?fid=M20b&product_isbn_issn=9780840053619

provides some Excel macros for the examples in the text, and Appendix B gives SAS macros as well. I will use the R computing package (available athttps://www.r-project.org/), and provide sample codes in lectures. Additional help with R will be provided in office hours.

6Course Requirements

6.1 Homework Assignments

- There will be EIGHT homework assignments.
- Homework submission is done through the HuskyCT course website.
- You are encouraged to collaborate with your classmates.
- Any homework you turn in must be of your own, however.
- **No late homework** will be accepted.

Homework is an important part of this course. The best way to truly learn statistics is by doing lots of homework problems. This course is unrelentingly cumulative. That is, the simple concepts we will cover in the beginning will have a direct bearing on the more sophisticated ideas that we will encounter later on. Thus keeping up with the homework is of paramount importance.

6.2 Examinations

There will be two midterm tests and the final exam. The midterm tests are cumulative only in the sense that later material relies on concepts encountered earlier. The tentative dates for the tests are:

2

- First midterm test – **February 25**
- Second midterm test – **April 7**
- Final exam – **May 6**

On the final exam the student is responsible for all material covered in the course. There will be no makeup final exam without a documented, legitimate reason that is outside of your control. Social conflicts or a heavy workload are unacceptable excuses.

7Grading

The final grade is a weighted average of the following:

- Homework – 40% (drop one lowest)
- Midterm tests – 30%
- Final exam – 30%

There will be no makeups for the midterm tests. If a test is missed for a valid reason, you must submit appropriate documentation within three days of the test. If documentation is not received in time, your test mark will be zero. If the (missed) test documentation is validated, the test's weight will be shifted to the other term test. Requests for test remarking must be submitted at the time the test is returned to you. The request must contain a justification and will only be considered for tests which were written in *ink*.

8University Policies

This course adheres to the policies from the University Senate, the Office of Institutional Equity, the Office of the Provost, and Community Standards. Seehttp://provost.uconn.edu/syllabi-referencesfor more information.

9Academic Integrity

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own, can result in disciplinary action. You are responsible for knowing the University Student Conduct Code on academic matters (https://guide.uconn.edu/student- interactions/academic-integritymisconduct/).

Additional guidelines for both homework assignments and exams either are given in the appropriate sections above or will appear in the first page of each homework assignment and exam. Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "U" for the course. If you have any questions regarding the expectations for a specific assignment or exam, please ask.

10Disability Services

Equal learning opportunities will be ensured for disabled students. Talk to the instructor or theCenter for Students with Disabilitiesfor any accessibility needs.

2020-239 BIST/STAT 5535 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2556
Request Proposer	Lachos Davila
Course Title	Nonparametric Methods
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Nonparametric Methods
Course Number	5535
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action of "revise course" of an existing course of the Statistics Department

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40

Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Not open to students who have passed STAT 4875.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5535. Nonparametric Methods 3.00 credits Prerequisites: Not open to students who have passed STAT 4875. Grading Basis: Graded Theory and applications of statistical methods for analyzing ordinal, non-normal data: one and multiple sample hypothesis testing, empirical distribution functions and applications, order statistics, rank tests, efficiency, linear and nonlinear regression, classification.
Provide proposed title and complete course catalog copy	STAT 5535. Nonparametric Methods 3.00 credits Prerequisites: Not open to students who have passed STAT 4875. Grading Basis: Graded Theory and applications of statistical methods for analyzing ordinal, non-normal data: one and multiple sample hypothesis testing, empirical distribution functions and applications, order statistics, rank tests, efficiency, linear and nonlinear regression, classification.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to apply basic concepts of Nonparametric Methods. In particular, theory and applications of statistical methods for analyzing ordinal, non-normal data: one and multiple sample hypothesis testing, empirical distribution functions and applications, order statistics, rank tests, efficiency, linear and nonlinear regression, classification.
Describe course assessments	Homework, quizzes, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** Syllabus_5535-NonParametric.docx | Syllabus_5535-NonParametric.docx | Syllabus

COMMENTS / APPROVALS						
Comments & Approvals Log	**Stage**	**Name**	**Time Stamp**	**Status**	**Committee Sign-Off**	**Comments**
	Draft	Victor Hugo Lachos Davila	08/24/2020 - 09:38	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.

	Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:23	Approve	9/2/2020	none
	College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 14:35	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslisting. PB.
	Return	Victor Hugo Lachos Davila	09/03/2020 - 19:05	Resubmit		Now this CAR can be approved from both units.
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:07	Approve	9/3/2020	STAT
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:07	Approve	9/3/2020	BIST

BIST/STAT 4875/5535: Nonparametric Methods

Course Information

- Syllabus: available on HuskyCT and **Link to Syllabus**[1]
- Time:
- Location:
- Instructor:
  - Office Hours
  - Email:
- Grader:
- Textbook: "**Nonparametric Statistical Methods**" 3rd Edition by by Myles Hol- lander , Douglas A. Wolfe, Eric Chicken.
- Notes: they will be posted on HuskyCT and **Link to Course Materials**[4].
- Prerequisite: Stat 3445 or consent of instructor.
- Course Objectives: The course provides an introduction to statistical estimation and inference methods that require relatively mild assumptions about the population distribution. Classical nonparametric hypothesis testing methods, Spearman and Kendall correlation coefficients, permutation tests, bootstrap methods, and nonparametric regressions will be covered.
- The Julia programming language will be introduced and used, and the emphasis is on writing code to implement nonparametric methods instead of using existing packages. If you did not use Julia before, it is recommend to use the Visual Studio Codeeditor.
  - **Julia** is freely available at `https://julialang.org/`
  - **Visual Studio Code** is freely available at `https://code.visualstudio.com/`

–Julia-vscode :
https://www.julia-vscode.org/
https://github.com/julia-vscode/julia-vscode

[1]https://www.dropbox.com/s/r7dnoo4thkdxg5k/Syllabus_5535-01_2020_Fall.pdf?dl=0
[2]https://uconn-cmr.webex.com/uconn-cmr/j.php?MTID=m4ff3c3fa13e3e745cae622373142c8dd
[3]https://uconn-cmr.webex.com/uconn-cmr/j.php?MTID=m7efa11b6917d1bb76aab038f3e71687b
[4]https://www.dropbox.com/sh/oc07m56rv7w0tm1/AADI8rHqbd4K0cSNeJjZaavha?dl=0

Grading

- For undergraduate students

Category	Weight
Homework	25%
Midterm	30%
Final	35%
Participation and Quizzes	10%

- For graduate students

Category	Weight
The scores obtained as above	85%
Final project	15%

Grades for the course are assigned totally at the instructor's discretion. As a rough guide:

Grade	Percentage	Grade	Percentage
A+	(97, 100]	B+	(87, 90)
A	[92, 97]	B	[82, 87]
A-	[90, 92)	B-	[80, 82)
Grade	Percentage	Grade	Percentage
C+	(77, 80)	D+	(67, 80)
C	[72, 77]	D	[62, 67]
C-	[70, 72)	D-	[60, 62)

- **Exams**: The midterm exam will be held in class on Wednesday, and the final exam will be held at UCONN scheduled time and location. They are open book, but you are not allowed to communicate with other students.

  No Make-up Exams! The following is tentative exam schedule.

  - Midterm (Tentative): Wednesday, October 21, inclass.
  - Final: to be announced.

- **Homework**: Unless stated, homework should be submitted through the HuskyCT course website. The work must be entirely yours. Neatness counts a lot. **Homework submission should be only in pdf file. Assignments will be accepted late up to 2 days beyond the due date, but with penalty. Late submissions within the 2-day grace period will only be worth 50% - 95% of the points. Submissions beyond 2 days will not be graded and will receive no credit. No homework grade will be dropped.**

- Participation and Quizzes: Pop quizzes may be given during lectures. If you miss a quiz, the only circumstance that you can make it up is you havenotified me of your time conflict with the class in advance. And it must be made up within 24 hours.

Material coverage

0.Introduction and Review 1.The dichotomous dataproblem 2.One-Sample Location Problem 3.Two-Sample Location Problem 4.Other Two-Sample Problems 5.The One-Way Layout 6.The Two-Way Layout 7.The Independence Problem 8.Comparing Two Success Probabilities 9.Nonparametric Bootstrap Methods 10.Nonparametric Regression

Academic Integrity

A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgement of the research and ideas of others. Mis- representing someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. Academic misconduct includes, but is not limited to, provid- ing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation (e.g. papers, projects, and examinations); any attempt to influence improperly (e.g. bribery, threats)any member of the faculty, staff, or administration of the University in any matter pertaining to academics or research; present- ing, as one's own,the ideas or words of another for academic evaluation; doing unauthorized academic work for which another person will receive credit or be evaluated; andpresenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved. A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation, and shall be subject to the sanctions and other remedies described in The Student Code.

Support Services

- Counseling and Mental Health Services 486-4705 (after hours, use 486-3427)
- Career Services 486-3013
- Alcohol and Other Drug Services 486-9431
- Dean of Students Office 486-3426
- Center for Students with Disabilities 486-2020 (voice), 486-2077(TDD)
- Online Course Support: https://achieve.uconn.edu/online-course/
- Keep Learning: https://onlinestudent.uconn.edu/keeplearning/

COVID-19 Emergency Semester

The syllabus is an aspirational statement of what we could and should do, and it projects how the fourteen weeks of the semester will unfold for us as a community of learners. But these are extraordinary and traumatic times. We must therefore acknowledge that the syllabus's usual promise of stability cannot predict challenges we might face in the next few months: our own health, the health of our loved ones, struggles with jobs and employment, care responsibilities of parents, grandparents, or children, or even the mundane problems of not having proper internet access or a quiet place in which to study. I thus want us to begin our semester with the understanding that it is hard for us to know the issues that will affect us individually or collectively in the coming months, and with the request that we approach our time together with compassion and empathy.

My biggest priority this semester is your physical, mental, and emotional well-being. To that end, I am committed to being as flexible as possible about deadlines and assignments, and I want to support your learning in any way that I can. Please be in touch if you are facing issues that impact your ability to participate fully in the class. If you encounter challenges that fall beyond the purview of the course, I am happy to serve as a sounding board or help you find the resources at UConn can best meet your needs. I am hopeful that our virtual classroom will provide a community for all of us in these difficult times, and that as a collective, we can continue to learn from each other as we navigate life during a pandemic.

Disclaimer

The professor reserves the right to make changes to the syllabus as necessitatedby circum- stances.

2020-240 BIST/STAT 5605 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2417
Request Proposer	Lachos Davila
Course Title	Applied Statistics II
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Course content will always be appropriate for both subjects.
Course Title	Applied Statistics II

Course Number	5605
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	STAT/BIST 5505
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	STAT/BIST 5605. Applied Statistics II 3.00 credits Prerequisites: Prerequisite: STAT 5505 . Grading Basis: Graded Analysis of variance, regression and correlation, analysis of covariance, general linear models, robust regression procedures, and regression diagnostics.
Provide proposed title and complete course catalog copy	STAT/BIST 5605. Applied Statistics II 3.00 credits Prerequisites: Prerequisite: STAT/BIST 5505 . Grading Basis: Graded Analysis of variance, regression and correlation, analysis of covariance, general linear models, robust regression procedures, and regression diagnostics.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to understand advanced concepts in applied statistics. In particular, analysis of variance, regression and correlation, analysis of covariance, general linear models, robust regression procedures, and regression diagnostics.
Describe course assessments	Homework, exams, and a course project is recomended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** syllabusSTAT5605AppliedII.docx | syllabusSTAT5605AppliedII.docx | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/17/2020 - 11:15	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office
Statistics	Victor Hugo Lachos Davila	09/01/2020 - 20:40	Approve	9/1/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/01/2020 - 20:40	Approve	9/1/2020	BIST

Applied Statistics II – BIST/STAT5605

Course Description (STAT5605):
Statistics from a data analytic viewpoint incorporating parametric and nonparamet- ric methods, exploratory data analysis, graphical methods, one-sample problems, jack- knifing, bootstrapping, robustness, two-sample problems, k-sample problems including one-way ANOVA, randomized block designs, two-way ANOVA, additivity, simple linear regression, multiple linear regression, analysis of covariance, and categorical data.

Topics covered in this course:

This is the second part of a sequence course (STAT5505 and STAT5605). Topics to be covered in STAT5605 include association, simple linear regression, multiple linear regression, model checking and diagnostics, remedies for departures from assumptions, variable and

model selection, nonparametric alternatives, generalized linear models in- cluding count and binary response regressions, one-way ANOVA, analysis of covariance modeling, random effects models and mixed effects models, repeated measures modeling, and generalized linear models.

Textbook:

Applied Linear Statistical Models, Fifth Edition, M.H. Kutner, C.J. Nachtsheim, J. Neter, and W. Li, McGraw-Hill/Irwin, 2005.

or

Custom Textbook For BIST/STAT5605 (Spring 2019). This is available at the campus store, and contains a subset of material from the *Applied Linear Statistical Models* text.

Course Material:

Lecture notes, sample code, datasets, information for homework assignments and project, etc., will be posted on the HuskyCT course website (available through http://lms.uconn.edu). Please visit this site often to access all the material. **The lecture notes and corresponding materials will be available before each class. You must study them ahead of time, so you can participate in active learning**.

Software:

- SAS $\geq$ 9.4; SAS ODS, Base, PROCEDURES, STAT, GRAPHICS, IML, and MACRO will be used. Available for (free) use through

  -library (HBL, level 1).

-Virtual PC: http://skybox.uconn.edu/

- R: freely available for download at http://www.r-project.org/.

NOTE: UCLA's Statistical Computing website offers excellent tutorials/resources for SAS and R (and other languages): www.ats.ucla.edu/stat/.

Course Activities & Grading:

- **Homework**
  - Approximately 10-11 homeworks will be assigned during the semester. Stu- dents may consult among themselves or with the instructor, but each student must submit his/her own work.
  - All homeworks are to be typed in Word or pdf documents, formatted according to the TA's instructions (posted on HuskyCT course website), and submitted through the HuskyCT course website. **Students may submit each assignment only once.**
  - All completed assignments are to be submitted by the indicated due date to be graded for full credit. Late submissions within a 2-day grace period will be graded for only 50% of the credit. Submissions beyond 2 days will not be graded and will receive no credit.
  - No credit will be given for submitted assignments exhibiting duplication or copying of solutions (from peers or existing solutions). See UConn's Academic Integrity policy below.

- **Participation**: We will have "active learning" in the classroom via discussion, Q&A, and problem solving. You must read the material (reading from the text KNNL and notes posted on the course HuksyCT site) before coming to class, and participate. You will be allowed a maximum of 2 in-class participation absences with prior permission (request by email to me).

- **Style**: If the grader or instructor has to reread a solution several times to find a train of thought, or if a solution was illegible, ambiguous, or incoherent, Style Points will be affected.

- **Course project**: The project will consist of data collection (from interesting websites/sources) and analysis, to be done in teams of two or three. Details will be posted periodically during the semester on the HuskyCT course website. This must be original work by each team, no copying or plagiarism. A project proposal will be due by 11:59pm, Saturday, March 30, 2019, and the final report will be due by 11:59pm, Saturday, May 4, 2019.

Exam: There will be one mid-term exam on Tuesday, March 12, 2019, 6:00pm- 8:00pm in STRS/WW16, and one final exam (date, time, and room: TBA). The seats for the mid-term exam and the final exam are pre-assigned with your name posted on the seat.

The grades will be assigned as follows:

Homework Assignments	20%
Participation/Style	5%
Course Project	10%
Mid-term Exam	30%
Final Exam	35%

This grade assignment requires a passing grade in each exam, else the final course grade is up to the discretion of the instructor. In order to obtain a good course grade, students must successfully complete all homework assignments, the course project, the mid-term exam, and the final exam; attend every lecture; and actively participate in class.

See http://registrar.uconn.edu/academic-calendar/ for the complete spring semester schedule.

Approximate Course Schedule

Week	Topic	Reading*
Jan 22, 24	Association, SLR, MLR	Notes 1 & 2
Jan 29, 31	Estimation and Prediction in SLR	Notes 2 & 3
Feb 5, 7	Inference in SLR and MLR	Notes 3 & 4
Feb 12, 14	Testing MLR Models	Note 5
Feb 19, 21	Regression Diagnostics	Note 6
Feb 26, 28	Remedies for Departure from Assumptions	Note 7
Mar 5, 7	Model Selection	Note 8
Mar 12	**Midterm Exam 6:00-8:00pm in STRS/WW16**	
Mar 14*	Qualitative Predictors	Note 9 Mar 17-
23	**SPRING RECESS**	
Mar 26*	ENAR (no class)	
Mar 28, Apr 2	GLM	Note 10
Apr 4, 9	Count and Binary Regression	Notes 11, 12
Apr 11, 16	Binomial Regression; Misc. Topics	Notes 13, 14 Apr 18
	Fixed-Effects ANOVA Modeling	Note 15
Apr 23*	Analysis of Covariance	Note 16 Apr 25,
30	Random-Effects Modeling; Misc. Topics	Note 17
May 2	Random-Effects Modeling; Misc. Topics	Review for the Final

* You must read all the sections from the course textbook shown in the Notes.

**Not available in Custom Textbook, but course notes will supply sufficient information.

NOTE: This course adheres to the policies from the University Senate, the Office of Institutional Equity, the Office of the Provost, and Community Standards. See http://provost.uconn.edu/syllabi-references for more information.

Students with Disabilities: The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the accommodations process is also available on their website at www.csd.uconn.edu.

Academic Integrity: A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgement of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. Academic misconduct includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation (e.g. papers, projects, and examinations); any attempt to influence improperly (e.g., bribery, threats) any member of the faculty, staff, or administration of the University in any matter

pertaining to academics or research; presenting, as one's own, the ideas or words of another for academic evaluation; doing unauthorized academic work for which another

person will receive credit or be evaluated; and presenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved. A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation, and shall be subject to the sanctions and other remedies described in The Student Code.

2020-241 BIST/STAT 5615 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2457
Request Proposer	Lachos Davila
Course Title	Categorical Data Analysis
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted.
Course Title	Categorical Data Analysis
Course Number	5615
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03

Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	BIST 5505 and BIST 5605, or instructor consent
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5615. Categorical Data Analysis 3.00 credits Prerequisites: STAT/BIST 5505 and STAT/BIST 5605, or instructor consent Grading Basis: Graded Statistical analysis of data on a nominal scale: discrete distributions, contingency tables, odds ratios, interval estimates, the goodness of fit tests, logistic/probit/complementary log-log regression, Poisson-related regression
Provide proposed title and complete course catalog copy	BIST 5615. Categorical Data Analysis 3.00 credits Prerequisites: BIST 5505 and BIST 5605, or instructor consent Grading Basis: Graded Statistical analysis of data on a nominal scale: discrete distributions, contingency tables, odds ratios, interval estimates, goodness of fit tests, logistic/probit/complementary log-log regression, Poisson-related regression.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to work over statistical analysis of data on a nominal scale: discrete distributions, contingency tables, odds ratios, interval estimates, the goodness of fit tests, logistic/probit/complementary log-log regression, Poisson-related regression
Describe course assessments	Homework, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link**: BIST5615syllabusR.docx; **File Name**: BIST5615syllabusR.docx; **File Type**: Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/20/2020 - 10:55	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 18:47	Approve	9/1/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 21:58	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslisting. PB.

	Return	Victor Hugo Lachos Davila	09/04/2020 - 14:40	Resubmit		Now this CAR can be approved from both units.
	Statistics	Victor Hugo Lachos Davila	09/04/2020 - 14:41	Approve	9/4/2020	BIST
	Statistics	Victor Hugo Lachos Davila	09/04/2020 - 14:42	Approve	9/4/2020	STAT

2020-242 BIST/STAT 5625 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2494
Request Proposer	Lachos Davila
Course Title	Introduction to Biostatistics
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Introduction to Biostatistics
Course Number	5625
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No

Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Biostatistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5625 3.00 credits Grading Basis: Graded Rates and proportions, sensitivity, specificity, two-way tables, odds ratios, relative risk, ordered and non-ordered classifications, rends, case-control studies, elements of regression including logistic and Poisson, additivity and interaction, combination of studies and meta-analysis.
Provide proposed title and complete course catalog copy	BIST 5625 3.00 credits Prerequisites: Open to graduate students in Biostatistics, others with permission Grading Basis: Graded Rates and proportions, sensitivity, specificity, two-way tables, odds ratios, relative risk, ordered and non-ordered classifications, rends, case-control studies, elements of regression including logistic and Poisson, additivity and interaction, combination of studies and meta-analysis.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to perform statistical analysis of rates and proportions, sensitivity, specificity, two-way tables, odds ratios, relative risk, ordered and non-ordered classifications, rends, case-control studies, elements of regression including logistic and Poisson, additivity and interaction, combination of studies and meta-analysis.
Describe course assessments	Homework, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** Syllabus_BIST5625.docx | Syllabus_BIST5625.docx | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/20/2020 - 11:06	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 18:50	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 21:54	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslisting. PB.

	Return	Victor Hugo Lachos Davila	09/04/2020 - 14:42	Resubmit		Now this CAR can be approved from both units.
	Statistics	Victor Hugo Lachos Davila	09/04/2020 - 14:44	Approve	9/4/2020	BIST
	Statistics	Victor Hugo Lachos Davila	09/04/2020 - 14:45	Approve	9/4/2020	STAT

BIST5625:

Introduction to Biostatistics

Course Information

- Time: TBD
- Location: TBD
- Instructor: TBD
  - Office: TBD
  - Office Hours: TBD
  - Office Phone: TBD
  - Email: TBD
- Grader: TBD

- Prerequisite for BIST5625: Open to graduate students in Biostatistics, others with permission.

- Course Description (from catalog): Rates and proportions, sensitivity, specificity, two-way tables, odd ratios, relative risk, ordered and non-ordered classifications, trends, case-control studies, elements of regression including logistic and Poisson, additivity and interaction, combination of studies and meta-analysis.

- Course Materials: Lecture notes, assignments, sample code, datasets, and other course mate- rial will be posted on the HuskyCT course website (available at https://lms.uconn.edu/). Please visit this site often to ensure timely obtainment of materials.

- Textbooks:

  1. Required: " **Statistical Methods for the Analysis of Biomedical Data**" 2nd Edition by Robert Woolson and William Clarke, John Wiley & Sons, Inc. 2002.
  2. Optional: " **The Little SAS Book - a Primer**" 4th Edition or later, by L. D. Delwiche and S. J. Slaughter
  3. Reference (Optional): " **Fundamentals of Biostatistics**" 8th Edition, by Bernard Ros- ner, Cengage Learning, 2015.
  4. Reference (Optional): " **Statistics for Epidemiology**", by Nicholas Jewell, Chapman and Hall, 2004.

Computing

SAS will be the primary statistical software package used in class. Any student who prefers the statistical software R is welcome to use it. However, support will be provided for SAS only. It is the student's responsibility to rectify any discrepancies in results reported from SAS and from R. For homework and exam problems that do not require the use of a computer, students should have access to a calculator that handles logarithms, exponentiation, and square roots.

Grading

The grade for this course will be based on:

Category	Weight
Homework	30%
Course Project	10%
Midterm Exam	25%
Final Exam	35%

- **Exams**: The midterm exam will be held in class and the final exam will be held at the UCONN scheduled time and location.
- **Homework**:
  - Homeworks will be assigned roughly weekly throughout the semester. Students may consult amongst themselves or with the instructor, but each student must submit his/her own work.
  - All homework assignments are to be typed in Word or pdf documents, formatted ac- cording to the grader's instructions (posted on HuskyCT course website), and submitted through the HuskyCT course website. **Students may submit each assignment only once.**
  - All completed assignments are to be submitted by the due date. Assignments will be accepted late up to 48 hours beyond the due date, but with penalty. If the submission is within 48 hours of the due date and time, total amount of credit available will be a linear function of time-beyond-due, ranging from 50% - 95% of the total points. Submissions over 48 hours late will not be graded and will receive no credit.
  - No credit will be given for submitted assignments exhibiting duplication or copying of solutions (from peers or existing solutions).
- **Project**: There will be one course project, assigned after the midterm, and due by the final Friday of the semester.

University Policies and Academic Integrity

This course adheres to the policies from the University Senate, the Office of Institutional Eq- uity, the Office of the Provost, Community Standards, and the Graduate School. See http://provost.uconn.edu/syllabi-references for more information. In particular, the policy on Academic Integrity states:

A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgement of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. Academic misconduct includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation (e.g. papers, projects, and examinations); any attempt to influence improperly (e.g. bribery, threats)any member of the faculty, staff, or administration of the University in any matter pertaining to academics or research; presenting, as one's own,the ideas or words of another for academic evaluation; doing unauthorized academic work for which another person will receive credit or be evaluated; and presenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved. A student who knowingly assists another student in committing an act of academic misconduct shall beequally accountable for the violation, and shall be subject to the sanctions and other remedies described in The Student Code.

2020-243 BIST/STAT 5635 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2458
Request Proposer	Lachos Davila
Course Title	Clinical Trials
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Clinical Trials
Course Number	5635
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO

Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Biostatistics, others with permission.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5635. Clinical Trials 3.00 credits Grading Basis: Graded Basic concepts of clinical trial analysis; controls, randomization, blinding, surrogate endpoints, sample size calculations, sequential monitoring, side-effect evaluation and intention-to-treat analyses. Also, experimental designs including dose-response study, multicenter trials, clinical trials for drug development, stratification, and cross-over trials.
Provide proposed title and complete course catalog copy	BIST 5635. Clinical Trials 3.00 credits Prerequisites: Open to graduate students in Biostatistics, others with permission. Grading Basis: Graded Basic concepts of clinical trial analysis; controls, randomization, blinding, surrogate endpoints, sample size calculations, sequential monitoring, side-effect evaluation and intention-to-treat analyses. Also, experimental designs including dose-response study, multicenter trials, clinical trials for drug development, stratification, and cross-over trials.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.

Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to perform statistical analysis of clinical trials; controls, randomization, blinding, surrogate endpoints, sample size calculations, sequential monitoring, side-effect evaluation and intention-to-treat analyses. Also, experimental designs including dose-response study, multicenter trials, clinical trials for drug development, stratification, and cross-over trials.
Describe course assessments	Homework, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** BIST5635CliniCalTRial.doc | BIST5635CliniCalTRial.doc | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/20/2020 - 11:23	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 18:52	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 21:51	Return	9/3/2020	Returning to proposer so both units can approve the un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/04/2020 - 14:46	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/04/2020 - 14:47	Approve	9/4/2020	BIST
Statistics	Victor Hugo Lachos Davila	09/04/2020 - 14:48	Approve	9/4/2020	STAT

Spring, 2020

Clinical Trials – Course Syllabus (STAT 5635)

Lecture 1 (Jan. 24) What is a Clinical Trial? Randomization, control, and blinding

Lecture 2 (Jan. 31) Drug Development Process Clinical Development Plan

Lecture 3 (Feb. 7) Phase I Study Design and Data Analysis Bioequivalence

Lecture 4 (Feb. 14) Categorical Data Analysis Phase II Proof of Concept

Lecture 5 (Feb. 21)	Dose Ranging Trials Considerations in Phase II Clinical Trials (Homework 1 due)
Lecture 6 (Feb. 28)	Data Analyses Concerns Intent-to-Treat Analyses
Lecture 7 (March 6)	Efficacy Data Analysis ANCOVA, sensitivity analysis, LOCF
Lecture 8 (March 13)	Longitudinal Data Analysis with Dropouts Mixed Model with Repeated Measures (MMRM), Estimand (Homework 2 due)
Lecture 9 (March 27)	Statistical Analysis Plan Clinical Study Report
Lecture 10 (April 3)	Safety Analyses and Reporting Adverse Events, Laboratory Abnormalities
Lecture 11 (April 10)	Drafting a protocol, Blinded data analysis Communications with regulatory agencies (Homework 3 due)
Lecture 12 (April 17)	Subgroup Analysis
Lecture 13 (April 24)	Non-inferiority trials
Lecture 14 (May 1)	Role of a clinical statistician (Final due)

Instructor - Naitee Ting, naitee.ting@Boehringer-Ingelheim.com 203-798-4999

Textbook – Fundamental Concepts for New Clinical Trialists – by Evans and Ting, Chapman & Hall/CRC, 2015

Phase II Clinical Development of New Drugs (2017) Springer, Ting, N, D. Chen, S. Ho, J. Capppelleri

Dose Finding in Drug Development (published by Springer, 2006), Edited by Naitee Ting

References:

Dose Finding in Drug Development (published by Springer, 2006), Edited by Naitee Ting

Pharmaceutical Statistics Using SAS®: A Practical Guide (SAS Press) by Alex Dmitrienko and Christy Chuang-Stein

An Introduction to Categorical Data Analysis (Wiley) by Alan Agristi

Design and Analysis of Clinical Trials: Concepts and Methodologies (published by Wiley-Interscience), by Shein-Chung Chow and Jen-Pei Liu
ISBN: 0-471-24985-8

Fundamentals of Clinical Trials, by Lawrence M. Friedman, Curt D. Furberg, David L. DeMets,
(Springer) ISBN: 0-387-98586-7

Biopharmaceutical Statistics for Drug Development, by Karl Peace (Marcel Dekker)

Statistical Methodology in the Pharmaceutical Sciences, by Donald Berry (Marcel Dekker)

Design and Analysis of Bioavailability and Bioequivalence Studies, by Shein-Chung Chow and Jen-Pei Liu (Marcel Dekker)

FDA guidance home page, ICH guidelines, http://www.fda.gov/cder/guidance/index.htm

2020-244 BIST/STAT 5645 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2460
Request Proposer	Lachos Davila
Course Title	Concepts and Analysis of Survival Data
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics

Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted.
Course Title	Concepts and Analysis of Survival Data
Course Number	5645
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Biostatistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5645. Concepts and Analysis of Survival Data 3.00 credits Grading Basis: Graded Survival models, censoring and truncation, nonparametric estimation of survival functions, comparison of treatment groups, mathematical and graphical methods for assessing goodness of fit, parametric and nonparametric regression models.
Provide proposed title and complete course catalog copy	BIST 5645. Concepts and Analysis of Survival Data 3.00 credits Prerequisites: Open to graduate students in Biostatistics, others with permission Grading Basis: Graded Survival models, censoring and truncation, nonparametric estimation of survival functions, comparison of treatment groups, mathematical and graphical methods for assessing goodness of fit, parametric and nonparametric regression models.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to perform analyses of survival data. In particular, students will study concepts of survival models, censoring and truncation, nonparametric estimation of survival functions, comparison of treatment groups, mathematical and graphical methods for assessing goodness of fit, parametric and nonparametric regression models.
Describe course assessments	Homework, quizzes, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** syllabus5645.docx | syllabus5645.docx | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/21/2020 - 15:23	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:24	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 17:50	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 18:30	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:33	Approve	9/3/2020	BIST
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:34	Approve	9/3/2020	STAT

BIST 5645. Concepts and Analysis of Survival Data

Office Hours:

Class Hours:

Class Room:

Teaching Assistant:

Textbook:

Survival Analysis, Second Edition, John P. Klein and Melvin Moeschberger, Springer-Verlag, 2003.

References:

(i) Bayesian Survival Analysis, Joseph G. Ibrahim, Ming-Hui Chen, Debajyoti Sinha, Springer-Verlag, 2001.

(ii) Analysis of Survival Data, D.R. Cox and D. Oakes, Chapman & Hall, 1984. (iii)

Statistical Models and Methods for Lifetime Data, J.F. Lawless, Wiley, 1982.

(iv) Modeling Survival Data, Extending the Cox Model, T.M. Therneau and P.M. Grambsch, Springer-Verlag, 2000.

(v) Analysis of Multivariate Survival Data, P. Hougaard, Springer-Verlag, 2000.

(vi) Counting Processes and Survival Analysis, T.R. Fleming and D.P. Harrington, Wiley, 1991.

(vii) Statistical Models Based on Counting Processes, P.K. Anderson, O. Borgan, R.D. Gill, and N. Keiding, Springer-Verlag, 1992.

(viii) Applied Survival Analysis Using R, D.F. Moore, Springer-Verlag, 2016.

Topics:

Topics to be covered are: survival models, censoring and truncation, nonparametric estimation of survival functions, comparison of treatment groups, mathematical and graphical

methods for assessing goodness of fit, parametric, and nonparametric regression models. Addition topics such as competing risk models and joint longitudinal and survival models will be covered if time permits.

Software:

- SAS 9.4; LIFETEST, LIFEREG, and PHREG will be used. Available for (free) use through

  -library (HBL, level 1).

  -Virtual PC (VPC): `http://skybox.uconn.edu/`

- R: freely available for download at `http://www.rproject.org/.`

NOTE: UCLA's Statistical Computing website offers excellent tutorials/resources for SAS And R (and other languages): `www.ats.ucla.edu/stat/.`

Course Materials:

Course Material:
Lecture notes, sample code, datasets, information for homework assignments and project, etc., will be posted on the HuskyCT course website (available through `http://lms.uconn.edu`). Please visit this site often to access all the material. The lecture notes and cor- responding material will be available before each class. You must study them ahead of time, so you can participate in active learning.

Course Activities:

Homework: There will be homework assignments (biweekly).

Project: Each project should be done by a team of two students. Each team is expected to search for a few current research or applied papers on survival analysis, then select a topic that they intend to work on. Alternatively, a team can perform a comprehensive data analysis on application of survival methods.

Key dates are given as follows:

October 4 Send me your team members;

November 3 First project proposal due (submit in HuskyCT);

November 23 Final project proposal due (submit in HuskyCT);

December 2: 2:30pm-5:30pm and December 4: 2:30-3:30pm 10 minutes Project Presentations.

December 8 Final project report due (submit in HuskyCT).

Midterm Exam:

Grading:

The grades will be assigned as follows:

Attendance*	5%
Homework Assignments	30%
Project Proposal	5%
Project Presentation	5%
Project Report	15%
Midterm Exam	40%

*Attendance sheets will be given at random times.

In order to obtain a good grade, you need to successfully complete all assignments, the course project, and the exam, to show your effort putting into the class, and to attend every lecture.

Students with Disabilities: The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the accommodations process is also available on their website at www.csd.uconn.edu.

Academic Integrity: A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgement of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. Academic misconduct includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation (e.g. papers, projects, and ex- aminations); any attempt to influence improperly (e.g., bribery, threats) any member of the faculty, staff, or administration of the University in any matter pertaining to academics or research; presenting, as one's own, the ideas or words of another for academic evaluation; do- ing unauthorized academic work for which another person will receive credit or be evaluated; and presenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved. A student who knowingly assists

another student in committing an act of academic misconduct shall be equally accountable for the violation, and shall be subject to the sanctions and other remedies described in The Student Code.

2020-245 BIST/STAT 5655 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2415
Request Proposer	Lachos Davila
Course Title	Epidemiology
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Epidemiology
Course Number	5655
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No

Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Biostatistics, others with permission
Corequisites	none
Recommended Preparation	none
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5655. Epidemiology 3.00 credits Prerequisites: Open to graduate students in the Department of Statistics, others with consent. Grading Basis: Graded The statistical study of health and illness in human and veterinary populations: epidemiological study designs, measures of disease frequency/effect/potential impact, selection and information biases, confounding, stratified analysis.
Provide proposed title and complete course catalog copy	BIST 5655. Epidemiology 3.00 credits Prerequisites: Open to graduate students in Biostatistics, others with consent. Grading Basis: Graded The statistical study of health and illness in human and veterinary populations: epidemiological study designs, measures of disease frequency/effect/potential impact, selection and information biases, confounding, stratified analysis.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	none
Please provide a brief description of course goals and learning objectives	Epidemiology is the study of how often diseases occur in different groups of people and why. Epidemiological information is used to plan and evaluate strategies to prevent illness and as a guide to the management of patients in whom disease has already developed.
Describe course assessments	Homework, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** Syllabus5655Epidemiology.docx | Syllabus5655Epidemiology.docx | Syllabus

COMMENTS / APPROVALS						
Comments & Approvals Log	**Stage**	**Name**	**Time Stamp**	**Status**	**Committee Sign-Off**	**Comments**

	Draft	Victor Hugo Lachos Davila	08/17/2020 - 09:57	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
	Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:28	Approve	9/2/2020	none
	College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 17:47	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslisting. PB.
	Return	Victor Hugo Lachos Davila	09/03/2020 - 18:34	Resubmit		Now this CAR can be approved from both units.
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:37	Approve	9/3/2020	BIST
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:38	Approve	9/3/2020	STAT

COURSE SYLLABUS

Course: BIST 5655
Title: Epidemiology
Time:
Location:
Office Hours:
Instructor:
E-mail:
Phone:

Teaching Assistant:

Course Description:

Epidemiology is the study of health and illness in human or veterinary populations. In this course, we consider real-world health and illness problems in human populations. This course consists of three parts. Part I covers objects and methods of epidemiologic research, including epidemiologic study designs, measures of disease frequency, measures of effect, and measures of potential impact. Part II covers the validity of epidemiologic research, including selection bias, information bias, and confounding. Part III covers epidemiologic analysis, including simple analysis, control of extraneous factors, stratified analysis, and matching.

Reading Material:

Required: ActivEpi Companion Textbook: A supplement for use with the ActivEpi CD-ROM, by David G. Kleinbaum, Kevin M. Sullivan, and Nancy B. Barker. Second Edition. New York, NY: Springer, 2013.

Optional: Epidemiology: An Introduction, by Kenneth J. Rothman. Second Edition. New York, NY: Oxford University Press, 2012.

Homework Assignments:

Generally, each chapter topic will have a homework assignment.

Course Grade:

Mean of three exam scores:

1st Midterm – 1/3; 2nd Midterm – 1/3; Final – 1/3

Course Syllabus

Date	Chapter in ActivEpi	Topic
September 4	1 2	Introduction; Epidemiological Research- An Overview
September 11	3	Epidemiologic Study Designs
September 18	4	Measures of Disease Frequency
September 25	5	Measures of Effect
October 2	6	Measures of Potential Impact
October 9	-- 7	1st Midterm Exam (Chapters 1-6) Validity & General Considerations
October 16	8	Selection Bias
October 23	9	Information Bias
October 30	10	Confounding

November 6	11	Confounding Involving Several Risk Factors
November 13	--	2nd Midterm Exam (Chs. 7-11)
	12	Simple Analyses
November 20	13	Control of Extraneous Factors
November 27	No Class	Thanksgiving Break
December 4	14	Stratified Analysis
December 11	15	Final Exam (Chs. 12-14)

2020-246 BIST/STAT 5665 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2536
Request Proposer	Lachos Davila
Course Title	Applied Multivariate Analysis
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Applied Multivariate Analysis
Course Number	5665
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002

Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Statistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5665. Applied Multivariate Analysis 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Multivariate normal distributions, inference about a mean vector, comparison of several multivariate means, principal components, factor analysis, canonical correlation analysis, discrimination and classification, cluster analysis.
Provide proposed title and complete course catalog copy	STAT 5665. Applied Multivariate Analysis 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Multivariate normal distributions, inference about a mean vector, comparison of several multivariate means, principal components, factor analysis, canonical correlation analysis, discrimination and classification, cluster analysis.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None

Please provide a brief description of course goals and learning objectives	The course also attempts to prepare graduate students to do research in the field of multivariate analysis, in particular, inferences about the mean vector, comparison of several multivariate means, principal components, factor analysis, canonical correlation analysis, discrimination and classification, cluster analysis. The course also attempts to prepare graduate students to do research in the field of multivariate statistical learning.
Describe course assessments	Homework, quizzes, exams, and course project are recommended.
Syllabus and other attachments	

Attachment Link	File Name	File Type
STAT5665-MultivariateAnalysis.docx	STAT5665-MultivariateAnalysis.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 12:03	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:24	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 14:32	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslist. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 19:15	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:16	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:17	Approve	9/3/2020	BIST

STAT/BIST 5665: Applied Multivariate Analysis

Instructor

Office Hours

Course Time & Location

Reference Books

Johnson, R. A. and Wichern, D. W. (2007) *Applied Multivariate Statistical Analysis*. Prentice Hall, 6 edn.

Izenman, A. J. (2008) *Mordern Multivariate Statistical Techniques*. Springer.

Hastie, T., Tibshirani, R. and Friedman, J. (2009) *The Elements of Statistical Learning*. Springer.

Anderson, T. (2003) .*An Introduction to Multivariate Statistical Analysis*. Wiley-Interscience.

Prerequisites

Open to graduate students in statistics, others with permission. Adequate background on linear models and mathematical statistics is preferred.

Course Materials & Website

Announcements, lecture notes and other course information will be posted on HuskyCT.

Course Description and Objectives

We will explore a variety of classical statistical methods used for multivariate data anal- ysis, emphasizing on methodologies, interpretations and the underlying theoretical ideas, along with several examples and case studies. Some modern multivariate techniques developed in the current age of data explosion and high-speed computation will also be introduced. The course aims to help students gain basic understanding of various multivariate techniques and develop skills to appropriately analyze multivariate data in practice. The course also attempts to prepare graduate students to do research in the field of multivariate statistical learning.

Topics may include but are not limited to:

- Descriptive statistics, graphics and sample geometry;
- Multivariate normal distribution;
- Inferences about mean vectors and multivariate analysis of variance;
- High-dimensional statistics and regularized estimation;
- Principal component analysis (PCA) and its variants;
- Dimension reduction (MDS, *t*-SNE, SDR, etc.);
- Factor analysis and its variants;
- Multivariate regression and its extensions;
- Canonical correlation analysis and its variants;
- Classification (Logistic regression, LDA, QDA, SVM, etc.);
- Clustering models & algorithms;
- Graphical models and network analysis.
- Neural networks and an introduction to deeplearning;

Grading (tentative)

Assignments	30%
Midterm Exam	30%
Project	40%
Total	100%

Grades for the course are assigned totally at the instructor's discretion. A **rough** guide:

A: 91–100%	A−: 89–90%	B+: 87–88%	B: 81–86%
B−: 79–80%	C+: 77–78%	C: 71–76%	C−: 69–70%
D+: 67–68%	D: 61–66%	D−: 59–60%	F: < 59%

Exam Time & Location:	TBD
Final project due:	TBD

- Homework: *The work must be entirely yours*. Neatness counts a lot. Unless prior arrangements are made for reasons judged to be acceptable by the instructor,late homework will receive ZERO credit.
- Exams: *There will be one midterm exam*.
- Project: *Each student is required to complete a class project* on a topic of your choice about multivariate statistics. There are many possibilities. For example, you may review an important topic in multivariate analysis, you may solve a real problem which requires comprehensive multivariate techniques, you may compare several methods via simulation, and you may build an R package to implement

certain multivariate methods. You are also encouraged to explore new ideas origi- nated from taking this course.

For students who are interested in exploring new ideas and doing research in this area, I will provide a list of potential topics for your consideration. You are encouraged to discuss with me and write a proposal of your idea. Once a topic is assigned to a student, it is no longer available for others to choose.

A final paper/report of your project should be about 5–8 pages in length, excluding any appendices you wish to attach. In any case, the project should present new work, not something you have done for another course. If you use any reference, you must cite and credit your sources. Your project will be shared with the class through the class website on HuskyCT.

Disclaimer
The instructor reserves the right to make changes to the syllabus as necessitated by cir- cumstances.

Academic Integrity

Academic integrity is a fundamental expectation of all students in this course. Cheating, plagiarism and other forms of academic misconduct will not be tolerated. According to Responsibilities of Community Life: The Student Code:

"*Academic misconduct is dishonest or unethical academic behavior that includes, but is not limited, to misrepresenting mastery in an academic area (e.g., cheating), intention- ally or knowingly failing to properly credit information, research or ideas to their rightful originators or representing such information, research or ideas as your own (e.g., plagia- rism).*"

Students with Accommodations

Any student with a disability who needs a classroom accommodation, access to tech- nology or other assistance in this course should contact the Center for Students with Disabilities and inform the instructor, so that arrangements can be made to accommo- date the student as best as possible.

Classroom Conduct

Students that engage in behavior that disrupts the learning environment may be asked to leave the class.

2020-247 BIST/STAT 5675 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2537
Request Proposer	Lachos Davila
Course Title	Bayesian Data Analysis
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course

STAT 5675 Section 1

Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Bayesian Data Analysis
Course Number	5675
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	STAT 5585 and STAT 5685, or instructor consent
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.

STAT 5675 Section 1

Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	STAT/BIST 5675 . Bayesian Data Analysis 3.00 credits Prerequisites: STAT 5585 and STAT 5685, or instructor consent. Grading Basis: Graded Theory of statistical inference based on Bayes' Theorem: basic probability theory, linear/nonlinear, graphical, and hierarchical models, decision theory, Bayes estimation and hypothesis testing, prior elicitation, Gibbs sampling, the Metropolis-Hastings algorithm, Monte Carlo integration.
Provide proposed title and complete course catalog copy	STAT 5675 . Bayesian Data Analysis 3.00 credits Prerequisites: STAT 5585 and STAT 5685, or instructor consent. Grading Basis: Graded Theory of statistical inference based on Bayes' Theorem: basic probability theory, linear/nonlinear, graphical, and hierarchical models, decision theory, Bayes estimation and hypothesis testing, prior elicitation, Gibbs sampling, the Metropolis-Hastings algorithm, Monte Carlo integration.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Bayesian inference is a powerful and increasingly popular statistical approach, which allows one to deal with complex problems in a conceptually simple and unified way. The recent introduction of Markov Chain Monte Carlo simulation methods have made the solution of large problems possible in Bayesian inference that were formerly intractable. This class will serve as an introduction to the Bayesian approach, which includes its statistical inference, its theoretical foundations and its application in diverse areas. Computer orientation is provided, with attention toward statistical packages (primarily R). In parallel to the material covered in lectures, each student will be asked to complete an independent project to illustrate a specific application or method of Bayesian statistics and its relevance in contemporary practice.
Describe course assessments	Homework, quizzes, exams, and course project are recommended.
Syllabus and other attachments	See attachments table below

Attachment Link	File Name	File Type
syllabus_STAT5665Bayesian.docx	syllabus_STAT5665Bayesian.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 17:06	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:25	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 13:53	Return	9/3/2020	Returning to proposer for approval from both units for un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 19:17	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:18	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:19	Approve	9/3/2020	BIST

Bayesian Data Analysis

Synopsis:

Bayesian inference is a powerful and increasingly popular statistical approach, which allows one to deal with complex problems in a conceptually simple and unified way. The recent introduction of Markov Chain Monte Carlo simulation methods have made the solution of large problems possible in Bayesian inference that were formerly intractable. This class will serve as an introduction to the Bayesian approach, which includes its statistical inference, its theoretical foundations and its application in diverse areas. Computer orientation is provided, with attention toward statistical packages (primarily R). In parallel to the material covered in lectures, each student will be asked to complete an independent project to illustrate a specific application or method of Bayesian statistics and its relevance in contemporary practice.

Instructors:

Emails:

Offices:

Office Hours:

TA Grader:

Email:

Office:

Prerequisites:

- This is not a "first course" in statistics. While familiarity with Bayesian methods is not assumed but we will assume that students have learned some basic statistical knowledge with common distributions and inference from a classical/frequentists perspective.
- Be familiar with R.

Textbooks:

- Peter D. Hoff (2009). *A First Course in Bayesian Statistical Methods*, Chapman & Hall/CRC.

Reference Book:

- Andrew Gelman, John B. Carlin, Hal S. Stern, David B. Dunson, Aki Vehtari and Donald B. Rubin (2014). *Bayesian Data Analysis (Third Edition)*, Chapman & Hall/CRC.
- Christian P. Robert (2007). *The Bayesian Choice: From Decision-Theoretic Foundations to Computational Implementation (Second Edition)*, Springer.
- Robert, Christian P. and Casella, George (2005). *Monte Carlo Statistical Methods (Second Edition)*, Springer.
- Jean-Michel Marin, Christian P. Robert (2014). *Bayesian Essentials with R (Second Edition)*, Springer.
- Jim Albert (2009). *Bayesian Computation with R (Second Edition),* Springer.

Tentative Topics:

Probability and Inference	approx 2 lectures
Parameter models	approx 4 lectures
Linear Models and Hierarchical models	approx 5 lectures
Hypothesis Testing and Model Uncertainty	approx 3 lectures
Midterm Exam	**The Week of March 9th**
Markov chain Monte Carlo methods	approx 4 lectures
Generalized Linear Models	approx 3 lectures
Advanced Topics	approx 3 lectures

Grades Scale: The final grade of this course consists of four parts.

Attendance/Participation	5%
Homework	20%
Midterm Exam	35%
Final Project	40%

Attendance/Participation:

- Attendance/Participation includes active involvement in class discussions and presentation evaluations.
- Laptops and cell-phones are not allowed in class (unless I let you). No food in class.
- Students are responsible for all announcements and supplements given within each class meet- ing.
- Attendance to the project presentations is required. Each absence costs 5/N points until 5 points are exhausted, where N = the number of classes that used for the project presentation.

- For the classes of the final project presentation, the exception can be given for absence due to medical emergencies with appropriate documents from a doctor.

Homework Assignments:

- Homework assignments are usually given from the end of each chapter and will normally be given **biweekly** on Thursday and will be due on Thursday in the following week. Homework should be submitted upon entering the classroom. To be fair to everyone, **late homework submission will not be accepted**.
- You are encouraged to discuss homework problems with your classmates but **you must independently write your own solutions by yourselves**.

Exam:

- There will be one midterm exam. The midterm exam will be covered with all materials learned before the test date.
- The midterm exam is closed-book. No calculators are allowed. But you can bring in a two- sided A4 sheet of notes.
- No make up exams will be given except for medical emergencies with appropriate documents from a doctor.

Project:

- There will be a final project in lieu of a final exam. The project will be done individually.
- The final project will ask you to identify a problem and/or data set, develop and implement one or more modeling techniques covered in the class.
- The final project consists of three parts:

  (1) a 1-page project proposal on which I will provide comments to help you identify and scope an appropriate project for the course (Due on Tuesday, March 24th, 2020);

  (2) a presentation in class, explaining the key ideas and results from your final project in a conference style talk;

  (3) a final paper, written in the style of a journal or conference paper to report what you have done in this project (Due on the Final Exam Date announced by the Registration Office later);

  The three parts above take 10%, 45% and 45%, respectively, in scoring the final project in 100 points.

Student Responsibility and Resources:

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
- Academic Integrity
- Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Accommodations:

Any student with a disability who needs a classroom accommodation, access to technology or other assistance in this course should contact the Center for Students with Disabilities and inform the instructor, so that arrangements can be made to accommodate the student as best as possible.

Academic Honesty:

As a University of Connecticut student, you have agreed to abide by the Student Code of the University of Connecticut. All academic work must meet the standards described in the Student Code. Lack of knowledge of the Student Code is not a reasonable explanation for a violation. Questions related to course assignments and the Student Code should be directed to the instructor.

2020-248 BIST/STAT 5685 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2416
Request Proposer	Lachos Davila
Course Title	Mathematical Statistics II 7
CAR Status	In Progress

Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Course content will always be appropriate for both subjects
Course Title	Mathematical Statistics II
Course Number	5685
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	STAT/BIST 5585
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5685. Mathematical Statistics II 3.00 credits Prerequisites: Prerequisite: STAT 5585 Grading Basis: Graded The sufficiency principle, the likelihood principle, the invariance principle, point estimation, methods of evaluating point estimators, hypotheses testing, methods of evaluating tests, interval estimation, methods of evaluating interval estimators.
Provide proposed title and complete course catalog copy	STAT/BIST 5685. Mathematical Statistics II 3.00 credits Prerequisites: Prerequisite: STAT/BIST 5585 Grading Basis: Graded The sufficiency principle, the likelihood principle, the invariance principle, point estimation, methods of evaluating point estimators, hypotheses testing, methods of evaluating tests, interval estimation, methods of evaluating interval estimators.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to understand and apply basic concepts in statistical inference. In particular, students will study concepts of sufficiency principle, the likelihood principle, the invariance principle, point estimation, methods of evaluating point estimators, hypotheses testing, methods of evaluating tests, interval estimation, methods of evaluating interval estimators and Bayesian methods.
Describe course assessments	Homework, quizzes, exams, and a course project is recommended.
Syllabus and other attachments	**Attachment Link**: Stat5685_syllabus.doc; **File Name**: Stat5685_syllabus.doc; **File Type**: Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/17/2020 - 11:03	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 07:30	Approve	9/2/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 07:30	Approve	9/2/2020	BIST

STAT/BIST 5685: Mathematical Statistics II

Textbook:

Mukhopadhyay (2000). Probability and Statistical Inference. Marcel Dekker, New York

Class materials: Available in HuskyCT

- Log in using your NetID and NetID password at http://huskyct.uconn.edu.
- Use HuskyCT to access homework assignment, assessment, but nothing else (no homework submission, no chatting, no mail, etc.).

Course Goal:

Upon completion of this course, students are expected to understand and apply basic concepts in statistical inference. In particular, students will study concepts of sufficiency principle, the likelihood principle, the invariance principle, point estimation, methods of evaluating point estimators, hypotheses testing, methods of evaluating tests, interval estimation, methods of evaluating interval estimators and Bayesian methods.

Grades: Your course grade will be determined as follows:

Homework	10%	
Quiz	20%	
2 midterm exams	40%	(20% each)
Final Exam	30%	

Grades will be assigned according to the scale (but may be slightly adjusted): A = 87-100, B = 73-86, C 60-72, D = 50-59 and F= 0-50, with course components weighted as listed above. Final grades will include +/−.

Homework: homework assignments will play a very important role in this course. Homework assignments will encompass book problems of chapters 6-10 and some section of Chapter 11 and 12. Some important notes on homework assignments:

- Although you are encouraged to discuss problems with each other, I expect each person to hand in their own work . No credit will be given to assignments that are substantially similar.
- Homework will be due in the first 10 minutes of classes on the due date. Late homework will not be accepted for any reason. Two randomly selected problems will be graded.
- Most assignments will be due on Tuesday, but I expect that you will work on them over the course of the week. The assignments are definitely not designed to be one-night jobs.
- The lowest homework grade will not count toward your final grade.

Quizzes: There will be on 15 minutes in-class quizzes. They will be on weeks 2, 4, 6, 9, and 13 (The week of Spring Break is excluded). Only the best four quizzes count toward your grade. Missed quizzes cannot be made up. They may involve in-class portions or previous homework.

Exams: The three exams will feature questions covering mathematical details, conceptual understanding, and application of the procedures and techniques learned. They may involve in-class portions, take-home portions, or a mixture of the two. Missed exams cannot be made up unless with documentation of reasons required by University policy. The two midterm exams (40%) are in week 7 and 11 (The week of Spring Break is excluded), respectively, and the final exam will be the **first Saturday** after the last day of classes.

Class sessions: Regular attendance is essential.

Outline of topics: The following table provides a rough sketch of the topics we'll cover during specific weeks, along with the associated book chapters.

Week	Topics	Book Chapters
Jan 21- 24	Sufficiency: Definition and	6.1 - 6.2
	the Neyman Factorization Theorem	
Jan 27-31	Minimal Sufficiency	6.3 - 6.4
	Information	
	Quiz 1 (Thursday, Jan 30)	
Feb 03-07	Information: Multi-parameter situation.	6.4-6.5
	Ancillary Statistics	
Feb 10-14	Completeness	6.6
	Basu's Theorem	
	Quiz 2 (Thursday, Feb 13)	
Feb 17-21	Point Estimation: Finding Estimators	7.1-7.2
	The Method of Maximum Likelihood (MLE)	
Feb 24-28	Criteria to compare estimators	7.3-7.4
	Unbiasedness, Bias, MSE, BLUE	
	Improved Unbiased Estimators	
	Quiz 3 (Thursday, Feb 27)	
Mar 02- 06	The Rao-Blackwell Theorem	7.5-7.6
	UMVUE estimators, Lehmann-Sheffe Theorem	
	unbiased estimation under incompleteness	
	Review for Midterm 1	
	Midterm Exam 1 (Thursday, March 05)	
Mar 09-13	Consistent estimators	7.7-8.2
`	Test of Hypotheses	
	Error probability and Power Function	
Mar 16-20	**Spring Recess**	
Mar 23-27	Most Powerful test, Neyman Pearson Lemma	8.3-8.4
	One-sides composite alternative hypothesis	
	Quiz 4 (Thursday, March 26)	
Mar 30-Apr03	Simple Null Vs. Two sides alternative	8.5
	Likelihood Ratio test	
	test under large samples	
Apr 06-10	Confidence Interval Estimation	9.1-9.2
	one samples problems.	
	The pivotal approach	
	Review for Midterm 2	

	Midterm Exam 2 (Thursday, April 09)	
Apr 13-17	Two sample problems	
	Multiple comparison	
	Confidence Interval with large sample	
Apr 20-24	Bayesian methods	10.1-10.4
	Prior and posterior	
	Conjugate priors, Point Estimation	
	Quiz 5 (Thursday, April 23)	
Apr 27-May01	Credible Intervals,	10.5-10.7
	Test of Hypotheses	
	Review for Final Exam	
May 02	**Final Exam (Saturday, May 02, 10:30am-12:30pm)**	

Important notes:

- This is a tough course, required for qualifying exams for graduate students in statistics.
- A single evaluation system is used, regardless of "stat" or "biostat" students.
- This should not be your first course in Statistics.
- All the exams and quizzes are closed book and closed notes; however, formula sheets may be allowed in the exams and quizzes.
- To be fair for every student, you can only consult one single-sided 8.5x11 (inches) notes during the quizzes; one double-sided 8.5x11 notes during the midterm exams; two double-sided 8.5x11 notes during the final exam. NO extra sheets, notes, book-answer references, etc. are allowed during the quizzes, midterm and final exams.
- It may help you to fail the course if you wait until the last night to start doing homework.
- Working on all the exercise problems is recommended. You will not learn how to solve problems by merely watching someone else do them; you must do them on your own.
- Academic integrity is seriously regarded and academic misconduct has severe consequences; students from a different culture please be aware.
- Lectures will be missed due to conference overseas. Make up classes will meet on **Saturday February 29th** (10:00 – 13:00) and on **Saturday, April 04th** (10:00 – 13:00). Classroom will be announced soon but mark your calendar now. Lecture(s) missed by the professor due to inclement weather will be also be made up on Saturdays or Sundays. Students will keep scheduling options open to make alternate arrangements (as needed) in order to accommodate all the make-up lectures.
- Please note that vacations, previously purchased tickets or reservations, social events, misreading the exam schedule and over-sleeping are not viable excuses for missing a final

exam. If you think that your situation warrants permission to reschedule, please contact the Dean of Students Office with any questions. Thank you in advance for your cooperation.

- Do not ever hesitate to email me or stop by for a visit, my door is always open. I hope you have a great semester! I look forward to teaching you.

2020-249 BIST/STAT 5705 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2461
Request Proposer	Lachos Davila
Course Title	Statistical Methods in Bioinformatics
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Statistical Methods in Bioinformatics
Course Number	5705
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40

Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	BIST 5505 and BIST 5585, or instructor consent.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5705. Statistical Methods in Bioinformatics 3.00 credits Prerequisites: STAT/BIST 5505 and STAT/BIST 5585, or instructor consent. Grading Basis: Graded Statistical methods and software tools for the analysis of biological data: sequencing methods; gene alignment methods; expression analysis; evolutionary models; analysis of proteomics, metabolomics, and methylation data; pathway analysis: gene network analysis.
Provide proposed title and complete course catalog copy	BIST 5705. Statistical Methods in Bioinformatics 3.00 credits Prerequisites: BIST 5505 and BIST 5585, or instructor consent. Grading Basis: Graded Statistical methods and software tools for the analysis of biological data: sequencing methods; gene alignment methods; expression analysis; evolutionary models; analysis of proteomics, metabolomics, and methylation data; pathway analysis: gene network analysis.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected 1) to introduce statistical methods in genomics. 3) to understand foundational concepts of statistical learning. 3) to learn how to use R to implement the methods learned.
Describe course assessments	Homework, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** 5705_syllabus_Spring2020.doc | 5705_syllabus_Spring2020.doc | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo	08/21/2020 - 15:30	Submit		This submission is for the proposal for changing cross-listed graduate courses and

		Lachos Davila				plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
	Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:31	Approve	9/2/2020	None
	College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 17:36	Return	9/3/2020	Returning to proposer for approval from both units for un-crosslisting. PB.
	Return	Victor Hugo Lachos Davila	09/03/2020 - 18:38	Resubmit		Now this CAR can be approved from both units.
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:40	Approve	9/3/2020	BIST
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:41	Approve	9/3/2020	STAT

BIST 5705 Statistical Methods in Bioinformatics

Instructor:

Time and Place:
Office hours:

Prerequisite: BIST 5505 (Applied Statistics I and BIST 5585 (Mathematical Statistics I), or instructor consent.

Course Description: This course will introduce statistical learning methods with applications in genomics. For genomic data, the number of variables (p) is usually larger than the number of samples (n). This course will feature modern statistical methods for large p, small n problems and high-dimensional data analysis. Topics include supervised learning, unsupervised learning, multiple testing and their applications in genomics.

Course Objectives:

- To introduce statistical methods in genomics.
- To understand foundational concepts of statistical learning.
- To learn how to use R to implement the methods learned.

Grading Policy: Grades will be based upon active class participation, homework assignments and a project.

Course Project: Students should select a specific statistical learning technique and a specific research problem in genomics. At least two data sets and two simulation examples of their creation should be included for the application of statistical methods in the project. Students will write a report of at least 5,000 words. For the chosen statistical learning

technique, the report should include discussion of the technique, the current literatures on this technique, an analysis of the strengths and weakness of this technique, and ways to improve or extend the technique. For the chosen genomics research problem, the report should include introduction of existing statistical methods having been applied to this problem, discussion of the limitations of those methods, the proposed statistical method to this problem, comparison of the proposed statistical method with other existing methods, discussion of future extensions to the research problem. Students will also give a presentation to the class reporting their research and findings. Students taking the course should meet with the instructor within the first month of class to discuss this project.

Reference Texts:

(1) Trevor Hastie, Robert Tibshirani, Jerome Friedman. (2009). *The Elements of Statistical Learning: data mining, inference, and prediction*. Springer Science & Business Media. (**ESL**) https://web.stanford.edu/~hastie/ElemStatLearn/

(2) Susan Holmes, Wolfgang Huber. (2019) *Modern Statistics for Modern Biology*. Cambridge University Press. (**MSMB**) http://web.stanford.edu/class/bios221/book/

R-programming resource:

- https://cran.r-project.org/doc/manuals/R-intro.html ("An Introduction to R")
- https://swcarpentry.github.io/r-novice-inflammation/ ("The best way to learn how to program is to do something useful, so this introduction to R is built around a common scientific task: data analysis.")

Tentative Course Schedule and Topics:

Week	Topics	Reference
Jan 21, 23	Introduction and Statistical Learning	ESL chapters 1 & 2; MSMB chapter 12
Jan 28, 30	Linear Regression	ESL chapter 3; MSMB chapter 12
Feb 4, 6	Shrinkage Regression Methods I	ESL chapter 3; MSMB chapter 12
Feb 11, 13	Shrinkage Regression Methods II	ESL chapter 3; MSMB chapter 12
Feb 18, 20	Model Assessment and Selection	ESL chapter 7; MSMB chapter 12
Feb 25, 27	Classification, Mixture Models	ESL chapter 4; MSMB chapter 4
March 3, 5	Sparse Classification I	ESL chapter 18; MSMB chapter 12
March 10, 12	Sparse Classification II	ESL chapter 18; MSMB chapter 12
March 24, 26	Clustering	ESL chapter 14; MSMB chapter 5
March 31, April 2	Clustering	ESL chapter 14; MSMB chapter 5
April 7, 9	Matrix Factorizations I	ESL chapter 14; MSMB chapters 7 & 9

April 14, 16	Matrix Factorizations II	ESL chapter 14; MSMB chapters 7 & 9
April 21, 23	Multiple Testing	ESL chapter 18; MSMB chapter 6
April 28, 30	Final Project Presentations	

2020-250 BIST/STAT 5725 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2557
Request Proposer	Lachos Davila
Course Title	Linear Models I
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Linear Models I
Course Number	5725
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40

Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Statistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5725. Linear Models I 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Linear and matrix algebra concepts, generalized inverses of matrices, multivariate normal distribution, distributions of quadratic forms in normal random vectors, least squares estimation for full rank and less than full rank linear models, estimation under linear restrictions, testing linear hypotheses.
Provide proposed title and complete course catalog copy	STAT 5725. Linear Models I 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Linear and matrix algebra concepts, generalized inverses of matrices, multivariate normal distribution, distributions of quadratic forms in normal random vectors, least squares estimation for full rank and less than full rank linear models, estimation under linear restrictions, testing linear hypotheses.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to apply basic concepts of linear and matrix algebra concepts, generalized inverses of matrices, multivariate normal distribution, distributions of quadratic forms in normal random vectors, least squares estimation for full rank and less than full rank linear models, estimation under linear restrictions, testing linear hypotheses.
Describe course assessments	Homework, quizzes, exams, and a course project is recommended.
Syllabus and other attachments	**Attachment Link** / **File Name** / **File Type**: STAT5725syll-LinearModelsI.docx / STAT5725syll-LinearModelsI.docx / Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo	08/24/2020 - 17:12	Submit		This submission is for the proposal for changing cross-listed graduate courses and

		Lachos Davila				plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
	Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:26	Approve	9/2/2020	None
	College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 13:50	Return	9/3/2020	Returning to proposer for approval from both units on the un-crosslist. PB.
	Return	Victor Hugo Lachos Davila	09/03/2020 - 19:19	Resubmit		Now this CAR can be approved from both units.
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:21	Approve	9/3/2020	STAT
	Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:22	Approve	9/3/2020	BIST

2020-251 BIST/STAT 5735 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2538
Request Proposer	Lachos Davila
Course Title	Linear Models II
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Linear Models II
Course Number	5735
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department

CONTACT INFO

Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	lectures

COURSE RESTRICTIONS	
Prerequisites	STAT 5725, STAT 5505, and STAT 5605. Open to PhD students who have passed the PhD Qualifying Exam in Statistics, others with permission.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5735. Linear Models II 3.00 credits Prerequisites: STAT/BIST 5725, STAT/BIST 5505, and STAT/BIST 5605. Open to students who have passed the PhD Qualifying Examination in Statistics; others with permission Grading Basis: Graded Multiple comparisons, fixed-effects linear models, random-effects and mixed-effects models, generalized linear models, variable selections, regularization and sparsity, support vector machines, additive models, and Bayesian linear models.
Provide proposed title and complete course catalog copy	STAT 5735. Linear Models II 3.00 credits Prerequisites: STAT 5725, STAT 5505, and STAT 5605. Open to students who have passed the PhD Qualifying Examination in Statistics; others with permission Grading Basis: Graded Multiple comparisons, fixed-effects linear models, random-effects and mixed-effects models, generalized linear models, variable selections, regularization and sparsity, support vector machines, additive models, and Bayesian linear models.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.

Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	This course will develop a theoretical understanding of more advanced statistical methods used in analyzing linear models. It will connect theoretical results with their application learned in applied statistics class. In addition, it will build up a solid foundation for students to study other advanced statistical modeling techniques such as spatial statistics, time series analysis and longitudinal data analysis.
Describe course assessments	Homework, exams, and course project are recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** syllabus5725-LM2.docx | syllabus5725-LM2.docx | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 17:17	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:28	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 13:46	Return	9/3/2020	Returning to proposer for approval of un-crosslist by both units. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 19:22	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:24	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 19:24	Approve	9/3/2020	BIST

2020-252 BIST/STAT 5815 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST

CAR ID	20-2534
Request Proposer	Lachos Davila
Course Title	Longitudinal Data Analysis
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO

Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2

Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Longitudinal Data Analysis
Course Number	5815
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	BIST 5505 and BIST 5605, or instructor consent
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No

Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	STAT/BIST 5815. Longitudinal Data Analysis 3.00 credits Prerequisites: STAT/BIST 5505 and STAT/BIST5605, or instructor consent Grading Basis: Graded Statistical theory and methodology for data collected over time in a clustered manner: design of experiments, exploratory data analysis, linear models for continuous data, general linear models for discrete data, marginal and mixed models, treatment of missing data.
Provide proposed title and complete course catalog copy	BIST 5815. Longitudinal Data Analysis 3.00 credits Prerequisites: BIST 5505 and BIST5605, or instructor consent Grading Basis: Graded Statistical theory and methodology for data collected over time in a clustered manner: design of experiments, exploratory data analysis, linear models for continuous data, general linear models for discrete data, marginal and mixed models, treatment of missing data.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	The goal of the lectures is to provide an overview of fundamental statistical models and methods for (classical and modern) analysis of longitudinal data, including key theoretical results, presented at a heuristic level. Students will practice implementation in R and/or SAS through homework assignments and investigate specific modern topics through the final project.
Describe course assessments	Homework, exams, and a course project is recommended.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** Syllabus_5815_Spring20.docx | Syllabus_5815_Spring20.docx | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 08:36	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 21:41	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 17:33	Return	9/3/2020	Returning to proposer for approval from both units for un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 18:43	Resubmit		Now this CAR can be approved from both units.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:45	Approve	9/3/2020	BIST
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 18:45	Approve	9/3/2020	STAT

Instructor:
Time and Place:
Office Hour:
Grader:

Prerequisite: BIST 5505 and BIST 5605; or instructor consent.

Goal: The goal of the lectures is to provide an overview of fundamental statistical models and methods for (classical and modern) analysis of longitudinal data, including key theoretical results, presented at a heuristic level. Students will practice implementation in R and/or SAS through homework assignments and investigate specific modern topics through the final project.

Topics: Statistical theory and methodology for data collected over time in a clustered manner: design of experiments, exploratory data analysis, linear models for continuous data, general linear models for discrete data, marginal and mixed models, treatment of missing data.

There is no textbook for this course. Instead, we will adopt the lecture notes of Marie Davidian at NCSU: https://www4.stat.ncsu.edu/~davidian/st732/notes.html. Chapters 1-6 will be covered in detail, and Chapters 7-8 (or -9 if time allows) will be covered selectively. To facilitate learning, students are expected to bring the lecture notes, preferably a hard copy, with them to class.

Computing/Software: Detailed R and SAS programs, with corresponding output, for demonstrating the methods discussed in the lecture notes are available at https://www4.stat.ncsu.edu/~davidian/st732/examples.html. The majority of the time in the lectures will be focused on the methodological developments and arguments and interpretation of analyses. Accordingly, students are expected to develop implementation skills independently through homework assignments (and the project).

Course Materials: In addition to the materials from the above websites, assignments and other course materials will be posted on the HuskyCT. Please visit this site often to ensure timely obtainment of materials.

Homework:

- Between 3 and 5 homework assignments will be given during the semester. The goal of the homework is to practice implementation in R or SAS using the examples at https://www4.stat.ncsu.edu/~davidian/st732/examples.html.
- Specifically, students will be asked to use the codes to conduct data analysis and write detailed reports. Collaboration on homework is permitted and even encouraged, but each student must complete and submit his/her own work. However, no credit will be given for submitted assignments exhibiting duplication or copying of solutions.

- All homework assignments should be in PDF format and submitted through the HuskyCT course website. They can be typed using Word, LaTeX or other typesetting language such as R Markdown as you see fit.
- All completed assignments are to be submitted by the due date, without exception, and students may submit each assignment only once.

Class Participation: Active participation (e.g., via Q&A and discussions) is strongly encouraged during lectures, and will contribute to the final grade. Thus, you are expected to read the materials before coming to class.

Midterm Exam: The midterm exam is scheduled on March 31, 12:30pm-1:45pm. It will be an online, open-book test conducted on HuskyCT. Its goal is to evaluate basic understanding of models and methodologies, including key theoretical results at a heuristic level.

Final Project: Each student will work alone on a project. You can choose a topic in longitudinal data analysis according to your interests, subject to the instructor's approval. The project can be, e.g., a literature review on a modern research topic, paper review, simulation studies (e.g., to compare different methods which may or may not be covered lectures), real data analysis, or development of a new method.

- Students should discuss with the instructor about their intended project ***as early as possible***, well before submitting their project proposal. This will be important to ensure the quality and suitability of the project.
- ***Project proposal will be due in week 7:*** This should be a detailed, one-page description of what you plan to do.
- ***Project interim report will be due in week 12:*** This informal report should indicate that your project in "on track" and include results obtained thus far and what remains to be done.
- ***Final project report will be due in the exam week:*** The report should be in PDF format of no more than 12 pages, including figures, tables and references.

Grading policy:

Class Participation: 5%
Homework: 20%
Midterm Exam: 20%
Project Proposal + Interim Report: 5%
Project Final Report: 50%

Further Resources: There is no textbook for this course, and no other books are required. The notes cite publications where further information on the specific developments presented can be found; see the reference list at https://www4.stat.ncsu.edu/~davidian/st732/notes.html. In addition, the following books are good resources for more general, further reading on longitudinal data methods:

Davidian, M. and Giltinan, D.M. (1995). *Nonlinear Models for Repeated Measurement Data*. London: Chapman and Hall/CRC Press.

Diggle, P.J., Heagerty, P., Liang, K.-Y., and Zeger, S.L. (2002). *Analysis of Longitudinal Data*, 2nd edition. New York: Oxford University Press.

Fitzmaurice, G.M., Laird, N.M., and Ware, J.H. (2011). *Applied Longitudinal Analysis*, 2nd edition. New York: Wiley.

Fitzmaurice, G., Davidian, M., Verbeke, G., and Molenberghs, G. (2009). *Longitudinal Data Analysis*. Boca Raton: Chapman and Hall/CRC Press.

Molenberghs, G. and Kenward, M. G. (2007). *Missing Data in Clinical Studies*. Chichester, UK: Wiley.

Pinheiro, J.C. and Bates, D.M. (2000). *Mixed Effects Models in S and S-PLUS*. New York: Springer.

Verbeke, G. and Molenberghs, T. (1997). *Linear Mixed Models in Practice: A SAS-Oriented Approach* Lecture Notes in Statistics 126. New York: Springer.

Verbeke, G. and Molenberghs, T. (2000). *Linear Mixed Models for Longitudinal Data*. New York:
Springer.

Vonesh, E.F. and Chinchilli, V.M. (1997). *Linear and Nonlinear Models for the Analysis of Repeated Measurements*. New York: Marcel Dekker.

Weiss, R.E. (2005). *Modeling Longitudinal Data*. New York: Springer.

This course adheres to the policies from the University Senate, the Office of Institutional Equity, the Office of the Provost, and Community Standards. For more information, please read http://provost.uconn.edu/syllabi-references.

2020-253 BIST/STAT 5825 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2558
Request Proposer	Lachos Davila
Course Title	Applied Time Series
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > UICC > Return > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither

Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Applied Time Series
Course Number	5825
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Statistics, others with permission
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.

Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	STAT/BIST 5825. Applied Time Series 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Introduction to prediction using time-series regression methods with non-seasonal and seasonal data. Smoothing methods for forecasting. Modeling and forecasting using univariate autoregressive moving average models.
Provide proposed title and complete course catalog copy	STAT 5825. Applied Time Series 3.00 credits Prerequisites: Open to graduate students in Statistics, others with permission Grading Basis: Graded Introduction to prediction using time-series regression methods with non-seasonal and seasonal data. Smoothing methods for forecasting. Modeling and forecasting using univariate autoregressive moving average models.
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Upon completion of this course, students are expected to analyze time-series regression models with non-seasonal and seasonal data. Smoothing methods for forecasting. Modeling and forecasting using univariate autoregressive moving average models.
Describe course assessments	Homework, quizzes, exams, and course project are recommended.
Syllabus and other attachments	

Attachment Link	File Name	File Type
STAT45825syll-TimeSeriespdf.docx	STAT45825syll-TimeSeriespdf.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 17:25	Submit		None
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:29	Approve	9/2/2020	None
UICC	Cheryl D Galli	09/03/2020 - 06:55	Return	9/3/2020	Please remove the UNIV designation under Course Info. The subject area for this course is not UNIV. Thank you.
Return	Victor Hugo Lachos Davila	09/03/2020 - 10:34	Resubmit		I have removed the UNIV designation and clicked in neither instead.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 10:40	Approve	9/3/2020	none
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 13:02	Return	9/3/2020	Returning to proposer because this is currently a cross-listed course so needs approval from both units. Email explains 9.3.2020. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 15:46	Resubmit		The CAR now can be approved from both units
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 15:50	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 15:50	Approve	9/3/2020	BIST

STAT 5825: Applied Time Series

Instructor:
e-mail:
URL:
Class Time:
Office Hours:

Text:

1. *Time Series: A Data Analysis Approach Using R.* R. H. Shumway and David S. Stoffer, CRC Press, 2019

2. *Time Series Analysis and Its Applications, with R Examples*, R. H. Shumway and D. S. Stoffer, Springer-Verlag. Free download of the book here: https://www.stat.pitt.edu/stoffer/tsa4/tsa4.pdf

See https://www.stat.pitt.edu/stoffer/tsda/ for the second author's website.

Lecture Notes on additional topics will be provided as needed. Before the course starts, students are expected to review (i) point and interval estimation, (ii) hypothesis testing, and (iii) regression analysis.

Reference Texts:

1. Time Series: Theory and Methods. P. J. Brockwell and R. A. Davis, Second edition, Springer-Verlag, 1991.

Statistical Computing using R will be used. Previous knowledge of R may be helpful, but is not required.

Distribution of Grades:

Homework (weekly via Assignment tool on HuskyCT): 20%
Online Quizzes: 20% (will be posted on HuskyCT on selected Fridays)
Midterm Exam: 25%
Final Course Project: 35%

Computing: Statistical computing will be an integral part of the course. We will use R (or RStudio) for statistical analysis. R is an open source software and can be freely downloaded from http://www.r-project.org/ An R package called astsa has been specifically developed by the authors that implements almost all methods introduced in the book. I will provide R templates that you can learn from.

Homework: Homework is a critical part of the course and will help you learn the material. You must submit your completed HW on HuskyCT on the due date. NO CREDIT will be given for late submissions.
Quizzes: There will be periodic online quizzes via HuskyCT throughout the semester. These will be posted for a 24-hour period on selected Fridays. You will get an announcement by email about the quiz. You must take it over a continuous 30-minute period. There will be NO MAKEUPS. There will also be one online quiz at the end of the semester which will be
cumulative, and may be considered as a "final exam" in the course.

Midterm Exam:.

Note: The quizzes and exam are open book/open notes. However, there should be no discussion with anyone, or copying in any way, or browsing the web for answers! The quizzes and exam must be done individually by each student on their own.

Final Course Project: Students will work on the project in groups of two. A detailed description about the project will be provided on HuskyCT.

Student Responsibility and Resources: As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

2020-254 BIST/STAT 5915 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2539
Request Proposer	Lachos Davila
Course Title	Statistical Data Science in Action
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither

Number of Subject Areas	2
Course Subject Area	STAT
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	BIST
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted
Course Title	Statistical Data Science in Action
Course Number	5915
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03
Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	STAT 5405 or instructor consent
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES

Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS

Provide existing title and complete course catalog copy	STAT/BIST 5915. Statistical Data Science in Action 3.00 credits Prerequisites: STAT 5405 or instructor consent Grading Basis: Graded Real-world statistical data science practice: problem formulation; integration of statistics, computing, and domain knowledge; collaboration; communication; reproducibility; project management.
Provide proposed title and complete course catalog copy	STAT 5915. Statistical Data Science in Action 3.00 credits Prerequisites: STAT 5405 or instructor consent Grading Basis: Graded Real-world statistical data science practice: problem formulation; integration of statistics, computing, and domain knowledge; collaboration; communication; reproducibility; project management
Reason for the course action	A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Prepare students to meet the real world data science challenges through a learning-by-doing environment. Students get hands-on, full cycle experience on a real world data science project, including problem formulation, literature review, data preparation, data manipulation, data analysis, model diagnosis, model selection, and project report. In addition to methodological and computational skills, students also gain soft skills such as collaboration, communication, and project management.
Describe course assessments	Topic presentations; progressive project development; project report; and project presentation.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** dataSciAction-syllabus.pdf | dataSciAction-syllabus.pdf | Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo Lachos Davila	08/24/2020 - 17:30	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:30	Approve	9/2/2020	None
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 13:40	Return	9/3/2020	Returning to proposer for approval from both departments (STAT and BIST) for this un-crosslisting. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 15:53	Resubmit		The CAR now can be approved from both units, BIST and STAT.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 15:55	Approve	9/3/2020	STAT
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 15:56	Approve	9/3/2020	BIST

2020-255 BIST/STAT 6494 Revise Course (guest: Ming Chen)

COURSE ACTION REQUEST	
CAR ID	20-2559
Request Proposer	Lachos Davila
Course Title	Seminar in Biostatistics
CAR Status	In Progress
Workflow History	Start > Draft > Statistics > UICC > Return > Statistics > College of Liberal Arts and Sciences > Return > Statistics > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	BIST
School / College	College of Liberal Arts and Sciences
Department	Statistics
Course Subject Area #2	STAT
School / College #2	College of Liberal Arts and Sciences
Department #2	Statistics
Reason for Cross Listing	Previously cross-listed courses are being un-crosslisted and the name has been changed.
Course Title	Seminar in Biostatistics
Course Number	6494
Will this use an existing course number?	Yes
Please explain the use of existing course number	The type of action is "revise course" of an existing course of the Statistics Department.

CONTACT INFO	
Initiator Name	Victor Hugo Lachos Davila
Initiator Department	Statistics
Initiator NetId	vid09002
Initiator Email	hlachos@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	40
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	03

Instructional Pattern	Lectures

COURSE RESTRICTIONS	
Prerequisites	Open to graduate students in Biostatistics, others with permission.
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	Yes
Number of Total Credits Allowed	24
Is it repeatable only with a change in topic?	Yes
Does it allow multiple enrollments in the same term?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	The faculty teaching the course is based in Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	BIST/STAT 6494. Seminar in Applied Statistics 1.00 - 6.00 credits | May be repeated for a total of 24 credits. Prerequisites: Open to graduate students in Statistics, others with permission. Grading Basis: Graded
Provide proposed title and complete course catalog copy	BIST 6494. Seminar in Biostatistics 3.00 credits| May be repeated for a total of 24 credits Prerequisites: Open to graduate students in Biostatistics, others with permission. Grading Basis: Graded
Reason for the course action	This course is used for developing new courses for the BIST MS program. A change to the BIST MS Program, which has been approved by the Department of Statistics and the CLAS Dean Office.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	Teaching new topics in Bisotatistics
Describe course assessments	Homeworks, projects, or exams.
Syllabus and other attachments	**Attachment Link**: BIST6494_syllabus_Spring2020.doc; **File Name**: BIST6494_syllabus_Spring2020.doc; **File Type**: Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Draft	Victor Hugo	08/24/2020 - 17:50	Submit		This submission is for the proposal for changing cross-listed graduate courses and plans of study for BIST and STAT MS Program which has been

	Lachos Davila				approved for the Statistics Department and the CLAS Dean Office.
Statistics	Victor Hugo Lachos Davila	09/02/2020 - 22:34	Approve	9/2/2020	This course is used for developing new courses for the BIST MS program
UICC	Cheryl D Galli	09/03/2020 - 06:54	Return	9/3/2020	Please remove the UNIV designation under Course Info. The subject area for this course is not UNIV. Thank you.
Return	Victor Hugo Lachos Davila	09/03/2020 - 10:38	Resubmit		I have removed the UNIV designation and clicked in neither instead.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 10:41	Approve	9/3/2020	none
College of Liberal Arts and Sciences	Pamela Bedore	09/03/2020 - 13:41	Return	9/3/2020	Returning to proposer for updates as per email 9.3.2020. PB.
Return	Victor Hugo Lachos Davila	09/03/2020 - 16:27	Resubmit		Suggested modifications has been incorporated.
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 16:31	Approve	9/3/2020	BIST
Statistics	Victor Hugo Lachos Davila	09/03/2020 - 16:31	Approve	9/3/2020	STAT

STAT 6494. Seminars in Biostatistics

Statistical Methods in Bioinformatics

Instructor:.

Time and Place:
Office hours:

Prerequisite: Open to graduate students in Biostatistics, others with permission.

Course Description: This course will introduce statistical learning methods with applications in genomics. For genomic data, the number of variables (p) is usually larger than the number of samples (n). This course will feature modern statistical methods for large p, small n problems and high-dimensional data analysis. Topics include supervised learning, unsupervised learning, multiple testing and their applications in genomics.

Course Objectives:

- To introduce statistical methods in genomics.
- To understand foundational concepts of statistical learning.
- To learn how to use R to implement the methods learned.

Grading Policy: Grades will be based upon active class participation, homework assignments and a project. The final project report is due on Sunday, May 3, 2020.

Course Project: Students should select a specific statistical learning technique and a specific research problem in genomics. At least two data sets and two simulation examples of their creation should be included for the application of statistical methods in the project. Students will write a report of at least 5,000 words. For the chosen statistical learning technique, the report should include discussion of the technique, the current literatures on this technique, an analysis of the strengths and weakness of this technique, and ways to improve or extend the technique. For the chosen genomics research problem, the report should include introduction of existing statistical methods having been applied to this problem, discussion of the limitations of those methods, the proposed statistical method to this problem, comparison of the proposed statistical method with other existing methods, discussion of future extensions to the research problem. Students will also give a presentation to the class reporting their research and findings. Students taking the course should meet with the instructor within the first month of class to discuss this project.

Reference Texts:

(3) Trevor Hastie, Robert Tibshirani, Jerome Friedman. (2009). *The Elements of Statistical Learning: data mining, inference, and prediction*. Springer Science & Business Media. (**ESL**) https://web.stanford.edu/~hastie/ElemStatLearn/

(4) Susan Holmes, Wolfgang Huber. (2019) *Modern Statistics for Modern Biology*. Cambridge University Press. (**MSMB**) http://web.stanford.edu/class/bios221/book/

R-programming resource:

- https://cran.r-project.org/doc/manuals/R-intro.html ("An Introduction to R")
- https://swcarpentry.github.io/r-novice-inflammation/ ("The best way to learn how to program is to do something useful, so this introduction to R is built around a common scientific task: data analysis.")

Tentative Course Schedule and Topics:

Week	Topics	Reference
Jan 21, 23	Introduction and Statistical Learning	ESL chapters 1 & 2; MSMB chapter 12
Jan 28, 30	Linear Regression	ESL chapter 3; MSMB chapter 12
Feb 4, 6	Shrinkage Regression Methods I	ESL chapter 3; MSMB chapter 12
Feb 11, 13	Shrinkage Regression Methods II	ESL chapter 3; MSMB chapter 12
Feb 18, 20	Model Assessment and Selection	ESL chapter 7; MSMB chapter 12
Feb 25, 27	Classification, Mixture Models	ESL chapter 4; MSMB chapter 4
March 3, 5	Sparse Classification I	ESL chapter 18; MSMB chapter 12

March 10, 12	Sparse Classification II	ESL chapter 18; MSMB chapter 12
March 24, 26	Clustering	ESL chapter 14; MSMB chapter 5
March 31, April 2	Clustering	ESL chapter 14; MSMB chapter 5
April 7, 9	Matrix Factorizations I	ESL chapter 14; MSMB chapters 7 & 9
April 14, 16	Matrix Factorizations II	ESL chapter 14; MSMB chapters 7 & 9
April 21, 23	Multiple Testing	ESL chapter 18; MSMB chapter 6
April 28, 30	Final Project Presentations	

2020-256 AMST 2293 Add Course (S)

COURSE ACTION REQUEST	
CAR ID	20-1890
Request Proposer	Vials
Course Title	International Study
CAR Status	In Progress
Workflow History	Start > Draft > American Studies > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Add Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	1
Course Subject Area	AMST
School / College	College of Liberal Arts and Sciences
Department	American Studies
Course Title	International Study
Course Number	2993
Will this use an existing course number?	No

CONTACT INFO	
Initiator Name	Christopher R Vials
Initiator Department	English
Initiator NetId	crv09002
Initiator Email	christopher.vials@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2020
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Scheduling Components	Lecture

Number of Sections	1
Number of Students per Section	20
Is this a Variable Credits Course?	Yes
Variable Credits Min	1
Variable Credits Max	9
Is this a Multi-Semester Course?	No
Instructional Pattern	lecture, field trips, and discussion

COURSE RESTRICTIONS	
Prerequisites	None
Corequisites	None
Recommended Preparation	None
Is Consent Required?	Departmental or Unit Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	Yes
Number of Total Credits Allowed	12
Is it repeatable only with a change in topic?	Yes
Does it allow multiple enrollments in the same term?	Yes
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	This question is not really applicable, as it is a study abroad course.
Will this course be taught off campus?	Yes
Off campus details	It is a foreign study course, so the campuses will vary.
Will this course be offered online?	No

COURSE DETAILS	
Provide proposed title and complete course catalog copy	AMST 2993. International Study 1.00 - 9.00 credits | May be repeated for credit to a maximum of 12 credits. Prerequisites: None. Grading Basis: Graded Special topics taken in an international study program. Consent of department head required, normally to be granted prior to the student's departure.
Reason for the course action	American Studies is moving more in the direction of study abroad programming. Also, we are already receiving course alignment requests from Education Abroad for students who took American Studies courses at other institutions outside the United States, and we have no way to offer credit for these requests currently.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	The course content and goals will vary widely as per the study abroad program.
Describe course assessments	These will vary widely as per the study abroad program, but may include participation in field trips, exams, and written essays.
Syllabus and other attachments	**Attachment Link** | **File Name** | **File Type** AMST 2993.docx | AMST 2993.docx | Syllabus

COMMENTS / APPROVALS						
Comments & Approvals Log	**Stage**	**Name**	**Time Stamp**	**Status**	**Committee Sign-Off**	**Comments**
	Draft	Christopher R Vials	01/28/2020 - 11:17	Submit		I am submitting this to the American Studies C&C representative -- Matt McKenzie -- for approval
	American Studies	Matthew G McKenzie	09/03/2020 - 12:47	Approve	9/3/2020	Approved as per programmatic goals to support study abroad opportunitiess

2020-257 ENGL 2640/W Revise Course (G) (S)

COURSE ACTION REQUEST	
CAR ID	20-2614
Request Proposer	Bedore
Course Title	Studies in Film
CAR Status	In Progress
Workflow History	Start > English > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	1
Course Subject Area	ENGL
School / College	College of Liberal Arts and Sciences
Department	English
Course Title	Studies in Film
Course Number	2640/W
Will this use an existing course number?	Yes
Please explain the use of existing course number	course revision

CONTACT INFO	
Initiator Name	Pamela Bedore
Initiator Department	English
Initiator NetId	pab05001
Initiator Email	pamela.bedore@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	Yes
Content Area 1 Arts and Humanities	Yes
Content Area 2 Social Sciences	No

Content Area 3 Science and Technology (non-Lab)	No
Content Area 3 Science and Technology (Lab)	No
Content Area 4 Diversity and Multiculturalism (non-International)	No
Content Area 4 Diversity and Multiculturalism (International)	No
Is this course in a College of Liberal Arts and Sciences General Education Area A - E?	Yes
Specify General Education Areas	Area B: Literature
General Education Competency	W
Will there also be a non-W section?	Yes
Environmental Literacy	No
Number of Sections	1
Number of Students per Section	19
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	3
Instructional Pattern	lecture, discussion, and writing workshop

COURSE RESTRICTIONS	
Prerequisites	ENGL 1007 or 1010 or 1011 or 2011
Corequisites	none
Recommended Preparation	none
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No
Is Consent Required for course?	No Consent Required

GRADING	
Is this course repeatable for credit?	Yes
Number of Total Credits Allowed	6
Is it repeatable only with a change in topic?	Yes
Does it allow multiple enrollments in the same term?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	It could be taught at any campus; at the moment instructor expertise is at Storrs.
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	ENGL 2640. Studies in Film 3.00 - 6.00 credits | May be repeated for a total of 6 credits. Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. Grading Basis: Graded Exploration of focused topics in film. Course content varies by section. CA 1. ENGL 2640W. Studies in Film 3.00 - 6.00 credits | May be repeated for a total of 6 credits. Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. Grading Basis: Graded

Provide proposed title and complete course catalog copy	ENGL 2640. Studies in Film 3.00 credits | May be repeated for a total of 6 credits. Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. Grading Basis: Graded Exploration of focused topics in film. Course content varies by section. CA 1. ENGL 2640W. Studies in Film 3.00 credits | May be repeated for a total of 6 credits. Prerequisites: ENGL 1007 or 1010 or 1011 or 2011. Grading Basis: Graded
Reason for the course action	The course revision is to change this course from variable topics to a standard 3-credit course.
Specify effect on other departments and overlap with existing courses	none. As specified in 2019 when the course was added, Film minors have to take two interdisciplinary film courses, currently offered by such departments as : AAAS/ENGL; CLCS; CAMS; COMM/LLAS; COMM/LLAS; ENGL; DRAM/HEJS/HRTS; ILCS; JOUR; LLAS; POLS; POLS; and WGSS. The proposed course gives these students another option and enhances the visibility of the English Department's courses. The Film Studies Minor coordinator, Jackie Loss, is excited to add courses from English to the current list of eligible courses.
Please provide a brief description of course goals and learning objectives	A student successfully completing this course should be able to 1) Intelligently discuss individual films and focused topics related to film form, culture, and history; 2) Write clearly and persuasively about such films and focused topics; 3) engage critical conversations about film form, culture, and history.
Describe course assessments	These will vary from instructor to instructor, but all sections will include substantial weekly readings, one or two exams, and papers requiring in-depth analytical and argumentative work. Weekly assignments will rotate between readings focused on the specific film topic and viewings of the films themselves. In ALL cases where film viewings are required, students will be responsible for watching the films and preparing themselves for in-class discussions about them (i.e., films will not be screened in class).
General Education Goals	The proposed course meets all seven purposes of the overall General Education requirement. In demanding students to engage focused topics in film through written essays and class discussions, it trains them to become "more articulate." They gain "intellectual breadth and versatility" by studying the development of a vital and influential artistic tradition. Whereas their engagements of films will help them to "acquire critical judgment," the course's focus on a diverse range of historical and international films and film topics helps them to "acquire moral sensitivity" and "consciousness of the diversity of human culture and experience." An understanding of film's role as perhaps the most popular and influential of twentieth- and twenty-first-century art forms enhances student "awareness of their era and society." Finally, the course's assessment formats, which highlight analysis, critical thinking, and written skills, all serve to help students' "understanding of the processes by which they can continue to acquire and use knowledge."
Content Area: Arts and Humanities	Regarding the specific content area requirements, the proposed course addresses directly the requirement that all such courses "appropriate to this category must, through historical, critical and/or aesthetic modes of inquiry, introduce students to and engage them in at least one of the following: Investigations and historical/critical analyses of human experience Inquiries into philosophical and/or political theory; Investigations into cultural or symbolic representation as an explicit subject of study; Comprehension and appreciation of written, visual, multi-modal and/or performing art forms; Creation or reenactment of artistic works culminating in individual or group publication, production or performance."
Writing Competency	The W version of the course offers students excellent opportunities to hone their analytical skills through in-depth engagements of both secondary historical texts and films. Regular draft-writing assignments encourage students to "think through writing" as they grapple with various secondary and cinematic texts. Formal writing will require students to make well-informed arguments about these texts. Primary modes of writing instruction will include in-class writing workshops, individual and/or group conferences, peer review, written feedback from the instructor, and formal student reflection. The course will require a minimum of 15 pages of polished, revised writing (the exact breakdown will vary by instructor, but the course will generally require 4-6 formal papers). The syllabus will include inform students that they must pass the “W” component of the course in order to pass the course.
Syllabus and other attachments	**Attachment Link** / **File Name** / **File Type** ENGL 2640 Syllabus.docx / ENGL 2640 Syllabus.docx / Syllabus ENGL 2640W Syllabus.docx / ENGL 2640W Syllabus.docx / Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Start	Pamela Bedore	08/28/2020 - 07:25	Submit		submitting proposal 8.28.2020.
English	Christopher R Vials	09/02/2020 - 11:51	Approve		I approve this minor tweak to the course -- it essentially just corrects a mistake from the time the course was submitted.

Brit-Lit on Film

Tuesday/Thursday: 12:30-1:45 / Storrs 011
Fall 2019

Professor: Greg Colón Semenza
Office Hours: Tuesday: 2-3:30; Wed 12:00-1:30

Office: 213 Austin
Phone: (Office) 860-486-4762
email: semenza@uconn.edu

COURSE DESCRIPTION

From *The Death of Nancy Sykes* (1897) to the *Harry Potter* films (2001-2011) and beyond, cinematic adaptations of British literature participate in a rich and sometimes troubled history. The literary text continues to dominate the conception and structure of even most recent studies of film adaptations of literature, which usually focus on cinematic adaptations of a particular canonical literary author (Austen, Dante, Cervantes, etc.), a particular literary period (medieval, Renaissance, Victorian), or a literary genre (novel, play). Typically, these approaches privilege the literary text over the film text, in part by working according to the terminology and taxonomies of literary studies. In this class, we will achieve a fresh perspective on adaptation by turning the relationship of book to film on its head. That is, we will chart a new history of British literature on film by considering how BritLit film adaptations evolve within movie history, not literary history.

The course doubles as an introduction to adaptation and appropriation and so, to build our foundations for understanding the processes of adapting literature to film, we will be focusing on four largely canonical texts which have been adapted multiple times: *Macbeth, Frankenstein, Casino Royale,* and *Watchmen.* We will also use these foundations to interrogate the same canonical British literary tradition, by considering changing definitions of Britishness, British literature, and the "literary."

TEXTS

Primary Texts: Please purchase the editions ordered for this class. You must bring the appropriate text to the relevant class in order to be counted as a participant in the discussion. I recommend strongly that you purchase a notebook for the course in which you can keep track of key passages, topics, and other issues we will be discussing in each class.

Shakespeare, *Macbeth* (Signet)
Shelley, *Frankenstein* (Norton, Second ed.)
Fleming, *Casino Royale* (Thomas & Mercer)
Moore and Gibbons, *Watchmen* (D.C. Comics)

Secondary Texts and Films: In addition to the books you are required to purchase, you will read multiple critical essays this semester and watch approximately 12 films. All of the essays and several of the films (see Course Schedule) are available as PDFs or web links on HuskyCT.

If not on HuskyCT, then the films are available on a variety of streaming platforms such as iTunes, Hulu, YouTube, Amazon Instant Video, and Netflix.

ASSIGNMENTS:

1.	Class Participation	20%
2.	Unannounced Reading Quizzes (approx. 10)	20%
3.	3 Film Analyses (750-1000 words each)	30%
5.	Final Adaptation Project	30%

Grading Scale:

Grade	Letter Grade	GPA
94-100	A	4.0
90-93	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

OFFICE HOURS & COMMUNICATION:

I will hold office hours in 213 Austin at the times listed above. Please come by to introduce yourself, ask any questions you might have, discuss future or current assignments, or seek instruction on specific problems with which you are wrestling. I am always happy to chat with students outside of class about what they're reading, thinking, and wondering, so don't be shy.

email: I do, of course, encourage professional communication through email. During the week, I will make it a point to check my email at least once a day. On weekends, I may not check email until Sunday night.

CLASS POLICIES:

Participation: 20% of your final grade will be based on class preparation and participation. The class participation grade refers to your involvement in class discussions, group work, office conferences, and your attendance record, general level of preparation, and completion of all assignments on time **(late assignments will be penalized a full letter grade for each calendar day they are late [for example, an A will become a B, etc.]).** Preparation encompasses the timely completion of homework and in-class assignments, and the thorough reading of all assigned texts prior to the class in which they are to be discussed. Note that I do not take "participation" simply to mean "talking a lot," though your in-class comments and questions will

certainly be a substantial part of the equation; if you feel shy or reticent about talking in class, you should make it a point to see me early in the semester so that we might discuss other strategies for registering your participation in the class.

A Note on Electronics and Professionalism: Please turn off all cell phones and other devices before class begins; note that, barring an official university request, and with the exception noted below, I do not allow laptops in class. For a recent summary of research on the negative impact of electronics in higher education learning environments, see the following article: https://www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-or-meeting.html. EXCEPTION: You may bring a laptop or e-reader to class on those days we will be discussing secondary readings posted on HuskyCT; you may use those devices during our discussions of those particular readings only. See Course Schedule for information about these allowances.

Plagiarism: Plagiarism can be defined very generally as the practice of offering words, facts, or the ideas of another person as your own in any academic exercise. It goes without saying that you are responsible for citing any words or ideas that you borrow. Plagiarism demonstrates contempt for your instructor, peers, and the purposes of liberal education. If you are caught plagiarizing, the case will be immediately referred to UConn's Director of Community Standards Should it be determined that you've deliberately violated the Student Code, there is a high likelihood of your failing the course, and the University may see fit to pursue other disciplinary actions against you. If you are uncertain as to what constitutes plagiarism, please consult the English Department's policies guide or see me outside of class.

Professor's Statement on Intellectual Property, etc.: My lectures, notes, handouts, and displays are protected by state common law and federal copyright law. They are my own original expression, and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. The recording of my lectures is not authorized unless, ahead of time, we make exceptional arrangements. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me.

Students with Disabilities: The English Department is committed to making educational opportunities available to all students. In order for faculty members to properly address the needs of students who have disabilities, it is necessary that those students approach their instructors as soon as the semester starts, preferably the first day of class. Also, contact the Center for Students with Disabilities as soon as possible. The CSD is located in 201 Wilbur Cross and can be reached at 860-486-2020.

University Writing Center: I strongly encourage you to take advantage of the University's Writing Center. It is a place where you can receive free help with your writing. Writers are invited to bring in any writing project, at any stage. Tutors do not edit or proofread, but they do help writers identify weak areas and work with them to improve. (Located in CLAS 159 and the Learning Resource Center in Homer Babbidge Library).

COURSE SCHEDULE

Aug 27	T	Introduction to Course
Aug 29	Th	Introduction to Adaptation, Appropriation, & Film Language; **Personal Introductions due on HuskyCT** Read Leitch, "Twelve Fallacies in Contemporary Adaptation Theory," 149-71 (Laptops Approved ☑)
Sept 3	T	Introduction to Film Language (continued)

Film Unit 1: *Macbeth*

Sept 5	Th	Read Shakespeare, *Macbeth*, Acts 1-3
Sept 10	T	Read Shakespeare, *Macbeth*, Acts 4-5
Sept 12	Th	Watch Billy Morrissette's *Scotland, PA* (2001)
Sept 17	T	Watch Akira Kurosawa's *Throne of Blood* (1957)
Sept 19	Th	Watch William Oldroyd's *Lady Macbeth* (2016); **Final day to turn in Paper 1**

History Unit

Sept 24	T	Read Hutcheon, "Beginning to Theorize Adaptation," 1-32 and Sanders, "What is Appropriation?" 26-41 (Laptops Approved ☑)
Sept 26	Th	Film History and Adaptation Read Semenza and Hasenfratz, "Introduction" to *The History of British Literature on Film*, 1-26 (Laptops Approved ☑) In-Class Screening: Various Short Films a la Nickelodeon Show 1. Lumière's *Employees Leaving the Lumière Factory* (1895) 2. Walter Dando's *King John* (1899) 3. Walter Booth's *Scrooge, or Marley's Ghost* (1901) 4. Georges Méliès' *A Trip to the Moon* (1902) 5. Edwin S. Porter's *Jack and the Beanstalk* (1902) 6. Edwin S. Porter's *The Great Train Robbery* (1903) 7. Cecil Hepworth's *Alice in Wonderland* (1903) 8. Georges Méliès' *Gulliver's Travels* (1903) 9. Percy Stow's *The Tempest* (1908) 10. Ugo Falena's *Salomé* (1910)

11. Romeo Bosetti's *Romeo Turns Bandit* (1910)

Oct 1	T	Read Tennyson, *Enoch Arden* (1864) and Barrett Browning, "The Cry of the Children" (1843) (Laptops Approved ☑)
		Watch D.W. Griffith's *Enoch Arden* (1911) and George Nichols' *The Cry of the Children* (1912)
Oct 3	Th	Reintroducing Sound
		Read Levinson, "Film Music and Narrative Agency," 402-17 (Laptops Approved ☑)

Film Unit 2: *Frankenstein*

Oct 8	T	Read Shelley, *Frankenstein*, Vol.1, 1-60
Oct 10	Th	Read Shelley, *Frankenstein*, Vol. 2, 61-105
Oct 15	T	Read Shelley, *Frankenstein*, Vol. 3, 107-161
Oct 17	Th	Read Shelley, *Frankenstein*, Vol. 3
Oct 22	T	Watch James Whale's *Frankenstein* (1931) and *The Bride of Frankenstein* (1935)
Oct 24	Th	Watch Terence Fisher's *The Curse of Frankenstein* (1957)
Oct 29	T	Watch Tim Burton's *Frankenweenie* (short, 1984) and feauture film (2012); Read Bortolotti and Hutcheon, "On the Origin of Adaptations: Rethinking Fidelity Discourse and 'Success'—Biologically," 443-58 (Laptops Approved ☑)

Film Unit 3: *Casino Royale*

Oct 31	Th	Read Fleming, *Casino Royale*, 1-75
Nov 5	T	Read Fleming, *Casino Royale*, 76-178
Nov 6	W	**Last Day for Final Project Office Conference**
Nov 7	Th	Watch Terence Young's *Dr. No* (1962)
Nov 12	T	Watch Martin Campbell's *Casino Royale* (2006); Read Harmon, "Bond's Number is Up: Black Female Actor 'is the New 007'"

Nov 14	Th	Watch Jay Roach's *Austin Powers: International Man of Mystery* (1997); **Final day to turn in a Film Analysis**

Film Unit 4: *Watchmen*

Nov 19	T	Read Moore and Gibbons, *Watchmen*, 8-104
Nov 21	Th	Read Moore and Gibbons, *Watchmen*, 105-206
Nov 26	T	Thanksgiving Break
Nov 28	Th	Thanksgiving Break
Dec 3	T	Read Moore and Gibbons, *Watchmen*, 207-414
Dec 5	Th	Watch Zack Snyder's *Watchmen* (2009) and episode #1 of HBO's *Watchmen* (2019-)

*** Final Project Due December 9th at 7 AM**

English 2640W: Studies in Film

Documentary Film and the Question of Truth

Tuesdays and Thursdays 11:00-12:15
Arjona 139

Professor: Greg Colón Semenza
Office: 213 Austin
Phone: (Office) 486-4762
Office Hours: Monday: 12-1:30; Thursday: 1:00-2:30
Email: semenza@uconn.edu

COURSE DESCRIPTION

2016 Word of the Year (Oxford Dictionaries): Post-Truth

Patricia Aufderheide remarks eloquently that "documentaries are *about* real life; they are not real life." Following logically, we might ask whether documentaries have more to do with truth, *per se*, or the ways we construct and consume *stories* about the truth. Furthermore, to what degree has the indecipherability of differences between fiction and non-fiction stories in our current media landscape—our inability to know how close we actually are to the truth—

exacerbated ideological divisions that cause us to interpret the same realities in dramatically different ways?

In this class, we will use the art form of documentary film to explore these and other questions about truth and reality in art, media, and forms of representation (such as our writings) more generally. Studying a mix of about 12 classic and recent documentaries, often in comparison with non-filmic meditations on truth, we'll celebrate the complexities of these beautiful films and delve deeply into the philosophical and aesthetic questions they inspire.

REQUIRED TEXTS

1. Sheila Curran Bernard, *Documentary Storytelling: Creative Nonfiction on Screen* (4th ed.)
2. Bill Nichols, *Introduction to Documentary* (3rd ed.)
3. "Course Packet" on HuskyCT (Blackboard)

List of Required Films and Screening Options: All required films are available on a variety of streaming platforms, including iTunes, Amazon, Hulu, Instant Video, Netflix, and FilmStruck. Amazon Instant Video tends to be convenient because there isn't any subscription necessary, and all the docs can be rented for about $2.99. Please note that Interlibrary Loan is a remarkably useful department of our library system. If you prefer DVDs at home, you should request them through ILL about a week prior to your planned viewing time. Our library's permanent DVD collection also contains all of these films, which can be borrowed on 3-hour loans. Note that several of the films are available on YouTube. While in certain cases, the quality of the YouTube upload will be excellent, in many others it will not be adequate for a film class viewing. It is recommended that you view all films *as films*, watching them in the screen format chosen by their creators, on as large a screen as you can manage to view them on, and in as distraction-free an environment as you can create.

On four occasions this semester, I will screen required films on campus at night. I strongly encourage you to attend these screenings, which will help us to reproduce a more authentic cinematic experience that will inform our discussions and analysis of the documentary film. The screening times are listed on the Class Schedule below.

Amy (Asif Kapadia; 2015).
Bowling for Columbine (Michael Moore; 2002)
Cameraperson (Kirsten Johnson; 2016).
Close-Up (Abbas Kiarostami; 1990).
League of Denial: The NFL's Concussion Crisis (Michael Kirk; 2013).
Gimme Shelter (Albert and David Maysles; 1970).
Leviathan (Lucien Castaing-Taylor and Verena Paravel; 2012).
Stories We Tell (Sarah Polley; 2012).
The Act of Killing (Joshua Oppenheimer; 2012).
The Gleaners and I (Agnès Varda; 2000).
The Thin Blue Line (Errol Morris; 1989).
Tower (Keith Maitland; 2016).

<u>In-Class</u>

In Search of the Edge (short; Scott Barrie; 1990)
Man with a Movie Camera (Dziga Vertov; 1929)
Night and Fog (Alan Resnais; 1956)

ASSIGNMENTS

1.	Class Grade: (Attendance, Preparation, Participation, etc.)	20%
2.	Quizzes (10-14 "pop" reading/viewing quizzes)	10%
3.	Screening Journal Papers (4 X 600 words)	30%
4.	Criticism Journal Papers (2 X 750 words)	20%
5.	Final Research Paper (1500 words with annotated bibliography)	20%

Grading Scale:

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94-100	A	4.0
90-93	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

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Plagiarism: Plagiarism can be defined very generally as the practice of offering words, facts, or the ideas of another person as your own in any academic exercise. It goes without saying that you are responsible for citing any words or ideas that you borrow. Plagiarism demonstrates contempt for your instructor, peers, and the purposes of liberal education. If you are caught plagiarizing, the case will be immediately referred to UConn's Director of Community Standards Should it be determined that you've deliberately violated the Student Code, there is a high likelihood of your failing the course, and the University may see fit to pursue other disciplinary actions against you. If you are uncertain as to what constitutes plagiarism, please consult the English Department's policies guide or see me outside of class.

Professor's Statement on Intellectual Property, etc.: My lectures, notes, handouts, and displays are protected by state common law and federal copyright law. They are my own original expression, and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. The recording of my lectures is not authorized unless, ahead of time, we make exceptional arrangements. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me.

Students with Disabilities: The English Department is committed to making educational opportunities available to all students. In order for faculty members to properly address the needs of students who have disabilities, it is necessary that those students approach their instructors as soon as the semester starts, preferably the first day of class. Also, contact the Center for Students with Disabilities as soon as possible. The CSD is located in 201 Wilbur Cross and can be reached at 860-486-2020.

University Writing Center: I strongly encourage you to take advantage of the University's Writing Center. It is a place where you can receive free help with your writing. Writers are invited to bring in any writing project, at any stage. Tutors do not edit or proofread, but they do help writers identify weak areas and work with them to improve. (Located in CLAS 159 and the Learning Resource Center in Homer Babbidge Library).

CLASS SCHEDULE

January 16	Tuesday	Introduction to Class; discuss syllabus.
January 18	Thursday	Introduction to Documentary. Read Bill Nichols, "How Can We Define Documentary Film," 1-28; read Bill Nichols, "The Domain of Documentary" (HuskyCT).
January 23	Tuesday	Film #1: Discuss *Tower* (Keith Maitland; 2016).
January 25	Thursday	Read Bill Nichols, "The Fact of Realism and the Fiction of Objectivity" (HuskyCT); continue discussion of *Tower*.
January 30	Tuesday	Read Aidan White, "FAKE NEWS: Facebook and Matters of Fact in the Post-Truth Era" (HuskyCT); read Farhad Manjoo, "How the Internet Is Loosening Our Grip on the Truth" (HuskyCT).
February 1	Thursday	Introduction to Film as Visual Art: Film Shots/Editing. [No readings for today; read ahead for next week].
February 6	Tuesday	Introduction to Documentary Storytelling. Read Sheila Curran Bernard, "Introduction," 1-16 and "Understanding Story," 19-119.
		***Last possible date to turn in Criticism Journal Paper 1.**
February 8	Thursday	Film #2: Discuss *Stories We Tell* (Sarah Polley; 2012).
February 13	Tuesday	Continue discussion of *Stories We Tell*.
February 15	Thursday	Read Richard Lanham, *Revising Prose* (selections on HuskyCT); In-class screening and discussion of *Night and Fog* (Resnais; 1956).
February 20	Tuesday	Film #3: Discuss *The Thin Blue Line* (Errol Morris; 1989); read Linda Williams, "Mirrors without Memories: Truth, History, and the New Documentary" (HuskyCT).
February 22	Thursday	Documentary Storytelling (continued). Read Sheila Curran Bernard, "Working with Story," 123-230.
		***Public Screening: *Gimme Shelter* (7 PM Location TBA)**
February 27	Tuesday	Film #4: Discuss *Gimme Shelter* (Albert and David Maysles; 1970).

March 1	Thursday	Film #5: Discuss *Amy* (Asif Kapadia; 2015).
March 6	Tuesday	Film #6: Discuss *The Gleaners and I* (Agnès Varda; 2000). ***Last possible date to turn in Screening Journal Paper 2.**
March 8	Thursday	Read Bill Nichols, "How Can We Differentiate among Documentary Models and Modes?" 104-131; read Bill Nichols, "How Can We Describe the Observational, Participatory, and Performative Modes?" 132-158.
March 13	Tuesday	SPRING RECESS
March 15	Thursday	SPRING RECESS
March 20	Tuesday	Read Bill Nichols, "How Can We Differentiate among Documentary Models and Modes?" 104-131; "Why Are Ethical Issues Central to Documentary Filmmaking?" 29-47; "How Have Documentaries Addressed Social and Political Issues?" 159-193.
March 22	Thursday	Film #7: Discuss *Frontline: League of Denial: The NFL's Concussion Crisis* (Michael Kirk; 2013). ***Public Screening: *The Act of Killing* (7 PM Location TBA)**
March 27	Tuesday	Film #8: *The Act of Killing* (Joshua Oppenheimer; 2012).
March 29	Thursday	Read Nick Fraser, "*The Act of Killing*: don't give an Oscar to this Snuff Movie" along with reader comments (HuskyCT); read Lawrence L. Langer, "Pre-Empting the Holocaust" (HuskyCT). ***Screening: *Bowling for Columbine* (7 PM Location TBA)**
April 3	Tuesday	Film #9: Discuss *Bowling for Columbine* (Michael Moore; 2002).
April 5	Thursday	Continue discussion of *Bowling for Columbine.* Read Jill Godmilow, "Kill the Documentary As We Know It" (HuskyCT); Read H. Frankfurt, "On Bullshit" (HuskyCT). ***Last possible date to turn in a Criticism Journal paper**
April 10	Tuesday	Alternate Media: Discuss *Serial* (podcast), Season 1, Episodes 1-6.
April 12	Thursday	Alternate Media: Discuss *Serial* (podcast), Season 1, Episodes 6-12.
April 17	Tuesday	Film # 10: Discuss *Cameraperson* (Kirsten Johnson; 2016).

		***Screening: *Leviathan* (7 PM Location TBA)** ****Final Examination Question Distributed**
April 19	Thursday	Film #11: Discuss *Leviathan* (Lucien Castaing-Taylor and Verena Paravel; 2012).
April 24	Tuesday	Film #12 (alternate media?): Discuss *Close-Up* (Abbas Kiarostami; 1990).
		***Last possible date to turn in a Screening Journal paper**
April 26	Thursday	Course Wrap-up
May 2	Wednesday	**Final Paper Due.**

2020-258 HIST/MAST 3544 Revise Course

COURSE ACTION REQUEST	
CAR ID	20-2394
Request Proposer	McKenzie
Course Title	Atlantic Voyages: European Maritime Expansion, 1400-1650
CAR Status	In Progress
Workflow History	Start > History > Maritime Studies > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	HIST
School / College	College of Liberal Arts and Sciences
Department	History
Course Subject Area #2	MAST
School / College #2	College of Liberal Arts and Sciences
Department #2	Maritime Studies
Reason for Cross Listing	Required to complete MAST major
Course Title	Atlantic Voyages: European Maritime Expansion, 1400-1650
Course Number	3544
Will this use an existing course number?	Yes
Please explain the use of existing course number	Updating title and description of current course

CONTACT INFO	
Initiator Name	Matthew G McKenzie
Initiator Department	History

Initiator NetId	mam06020
Initiator Email	matthew.mckenzie@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	No
Number of Sections	1
Number of Students per Section	25
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	3
Instructional Pattern	lecture

COURSE RESTRICTIONS	
Prerequisites	none
Corequisites	none
Recommended Preparation	none
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Avery Point
If not generally available at all campuses, please explain why	
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	HIST/MAST 3544. Atlantic Voyages Three credits. Seafaring and society since the age of Columbus. Emphasis on the Anglo-American experience.
Provide proposed title and complete course catalog copy	HIST/MAST 3544. Atlantic Voyages: European Maritime Expansion, 1400-1650. Three credits. Late medieval and early modern European expansion into the Atlantic and Indian oceans, with particular attention paid to European, Asian, and American contexts within which that expansion took place. Topics include technology adoption and adaptation; convergence of trade, imperial expansion and imperial identity construction; European, Asian, African, and American conditions affecting expansion; piracy and settlement; historiographical legacies and later imperialism; and decolonization of contemporary understandings.
Reason for the course action	Update course title and description to better reflect current scholarship.
Specify effect on other departments and	None

overlap with existing courses	
Please provide a brief description of course goals and learning objectives	To ensure that students understand European expansion as a product of global change. In particular: contextualize European expansion within a global context; explore the intersection of non-European technologies in enabling European expansion; analyze the construction of "otherness" and of European imperial identities; understand how this period of history has been used in later imperial projects and why those legacies are being challenged today.
Describe course assessments	Essay exams, analytical papers integrating course content, class presentations; regular reading assignments (not necessarily weekly)
Syllabus and other attachments	

Attachment Link	File Name	File Type
History 3544 Course Syllabus Fall 2020.docx	History 3544 Course Syllabus Fall 2020.docx	Syllabus

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Start	Matthew G McKenzie	08/14/2020 - 08:52	Submit		Updating course to bring ensure title and description reflects current shcolarship. Approved by both HIST and MAST committees via email, 10 August 2020
History	Matthew G McKenzie	08/14/2020 - 09:11	Approve	8/10/2020	Approved by both HIST and MAST committees via email correspondence, 10 August 2020
Maritime Studies	Matthew G McKenzie	08/14/2020 - 09:12	Approve	8/10/2020	Approved by both MAST and HIST committees via email 10 August 2020

HIST/MAST 3544
Atlantic Voyages: European Maritime Expansion, 1400-1650.
Matthew McKenzie, Associate Professor History and Maritime Studies
Matthew.mckenzie@uconn.edu
860-405-9270

COVID-19 Protocols
Students are reminded to remain informed about, and adhere to, the dynamic policies surrounding COVID-19 and the protection of yourselves and of the UCONN community. Students, faculty, and staff in this class must follow social distancing, PPE, and facial covering requirements as directed by UCONN administration. For up to date information, see:
https://uconn.edu/public-notification/coronavirus/

Office Hours
Mondays and Wednesdays, 8:00am to 9:00am, ACD 114B and by appointment

Catalog description (pending approval)
Analysis of late medieval and early modern European expansion into the Atlantic and Indian oceans, with particular attention to the European, Asian, and American contexts within which that expansion took place. Topics include technology adoption and adaptation; the convergence of trade, imperial expansion and imperial identity construction; European local conditions, conflict, and maritime competition; dynamics of Asian, African, and American politics; piracy and settlement; historiographical legacies and later imperialism; and the decolonization of contemporary understandings.

COURSE SYLLABUS

Course Description

This course introduces and contextualizes Europeans' maritime expansion into the Atlantic and shortly thereafter the Indian Oceans. Beginning with Indian Ocean system of the 13th century, students will explore the changing role of trade in late medieval Europe; adoption and adaptation of Middle Eastern ideas and technologies; the convergence of religious, economic, and geopolitical ambitions that drove maritime expansion; and the political, cultural, and geopolitical contexts within which Europeans found themselves as they pushed into South Asia and the Americas. Breaking with past historiographical treatment of this period, this course does not seek to explain why Europe "rose" or "won" in the early modern imperialist game, but rather situate that expansion within a larger understanding of Asian, American, and African historical changes into which Europeans inserted themselves. Thus, this course seeks to explain why Europeans expanded as much in terms of Ottoman, sub-Saharan African, Mughal, and Native American terms as in European ones. Yes, Europeans were indeed able to created maritime networks across the globe during the late medieval and early modern periods, but their ability to do so relied heavily upon non-European forces. Understanding those contexts, as this course seeks to show to students, goes far in better understanding contemporary geopolitical and economic changes.

Course Themes

As described above, the course will focus upon the following four, interwoven themes that will form the core of student evaluation and assessment:

European Expansion within a Global Context

It is undeniable that western European nations expanded into the Atlantic and Indian oceans beginning in the 14th century. What is more arguable is whether such expansion was a product of some unique European traits or abilities that enabled them—and not other peoples—to do so. How did Europeans' communications with other Asians, Africans, and Americans—both peaceful and bellicose—influence, inspire, allow, and drive European maritime expansion?

Technologies, Institutions, and the Practical Challenges of European Maritime Expansion

Sending vessels to sea for long periods and having some reasonable expectation of their safe return is a complicated, expensive, risky, and challenging prospect. What were the physical and operational challenges of maritime expansion and how did Atlantic seafaring differ from Mediterranean seafaring? What technologies, institutions, and labor arrangements—both at sea and in colonial lands—did Europeans develop and adopt from non-Europeans to support and profit from sending vessels to sea? What role did nascent states play in these endeavors and why?

Expansion, "Otherness," and the Construction of Imperial Identities

Beginning in the 14th century, more Europeans encountered new cultures and peoples than ever before. Many of those in those encounters, and many more never leaving home, took these moments of cultural connection as an opportunity to define European-ness for the first time. Through the course of the early modern period, that identity became the root of an imperial mission that used whiteness, Christianity, European-ness, and later, commercial expansion, to justify the subjugation of other peoples. What elements in European culture, history, society and economy, led Europeans to define themselves—and justify their actions—as they did?

Legacies of Europe's Age of Maritime Expansion and Its Reception by Formerly Colonized Peoples

How have historians interpreted early modern European maritime expansion since the early modern period? How have politicians, and whole nations even, looked to these histories, and what ideological role did they play in subsequent colonial expansions and post-colonial discourses? What role did the history of European maritime expansion play in justifying colonization? In turn, how have post-colonial scholars and peoples reinterpreted this moment?

Policies

This course adheres to current University policies regarding COVID-19 protections, as well as policies laid out in the Student Code. Specific information pertaining to those policies can be found at the following web locations:

- Policy Against Discrimination, Harassment and Related Interpersonal Violence: https://policy.uconn.edu/2015/12/29/policy-against-discrimination-harassment-and-related-interpersonal-violence/
- Class Attendance, Final Examinations, Grades, Grade Points, Credits and Skills: https://catalog.uconn.edu/academic-regulations/grade-information/#attendance
- The University of Connecticut Student Code: https://community.uconn.edu/the-student-code/
- Academic Integrity: https://community.uconn.edu/the-student-code-appendix-a/
- Accommodation for Students with Disabilities: (more information located here: https://csd.uconn.edu/)

This course formally adopts these policies by reference.

Grading

Student performance will be measured through the following assessment schedule

Exam I	25%
Exam II	25%
Paper I	25%
Final Assessment	25%

This course will adhere to the following grading rubric:

A	95%	C	75%
A-	92%	C-	72%
B+	88%	D+	68%
B	85%	D	65%
B-	82%	D-	62%
C+	78%	F	No credit

Readings (in order of assignment)

Ezra Pound (trans.) "The Seafarer" (see below)
Francisco Bethencourt, *Racisms: From the Crusades to the Twentieth Century* (Princeton, 2014).
John C. Appleby, *Women and English Piracy: Partners and Victims of Crime* (Boydell and Brewer, 2015).
Woodward, "John Smith and the Campaign for New England," *New England Quarterly*, vol. 81, no.1 (2008): 91-125 (to be distributed in class).
Kevin P. McDonald, *Pirates, Merchants, Settlers, and Slaves: Colonial America and the Indo-Atlantic World* (U. of California Press, 2015).
J.C. Sharman, *Empires of the Weak: The Real Story of European Expansion and the Creation of the New World Order* (Princeton, 2019).

Course Outline

Week 1
31 August
Introductions; maritime history in the post-colonial moment; instructor's foundational approaches to the course.
Discussion, "The Seafarer" (Ezra Pound, trans.).

2 September
Unit I: Afro-Eurasia in the 13th and 14th Centuries
Indian Ocean system of the 13th century

Week 2
7 September
Labor Day, No Class

9 September
Overcoming the challenges of long-distance trade

Week 3
14 September
Medieval European visions of the world
Discussion, Bethencourt, *Racisms* (2014), pp. 1-62.

16 September
Private and Infrastructural needs for maritime trade

Week 4
21 September
The North Sea meets the Mediterranean: naval architectural technology transfer across maritime trading networks.

23 September
Navigational innovation across maritime trading networks
MEET AT SOUTH CIRCLE OBELISK

Week 5
28 September
Unit I Exam

30 September
No Class

Week 6
5 October
Unit 2: Africans, Ottomans, Native Americans, and Iberian Maritime Expansion
Africa and African Trade: European entry and reception into African trading systems

7 October
Sugar, Atlantic Islands, Slaves, and the Fall of Constantinople, 1453.

Week 7
12 October
Discussion, Bethencourt, *Racisms* (2014), pp. 63-158.

14 October
Unit II Exam

Week 8
19 October
Unit 3: Global Trade and Religious War: God and Mammon on the Gundeck
Columbus, the Reconquista, and Native American Calamity

21 October
Iberian Indian Ocean trading revolution and the transformation of European economic thought.

Week 9
26 October
Reformation, Dutch Rebellion, Piracy, and Militarization of NW European trading routes

28 October
English explorations: Militant Protestantism and English Maritime Activities

Week 10
2 November
Discussion, Appleby, *Women and English Piracy* (2015).

4 November
Discussion, Woodward "Captain John Smith and the Campaign for New England."

Week 11
9 November
Unit 4: The Legacies of Trade, Plunder, and Settlement
Native North American Trading Networks on Eve of European Commercial Contact

11 November
Trade and Dislocation: Transatlantic Markets and Native American Marginalization

Week 12
16 November
Historians, Empire, and Europe's Maritime Expansion

18 November
The Sciences' Imperial Foundations: Cartography, Anthropology, and Botany
Units III and IV Paper Due

11/22-11/28: **Thanksgiving break**

Week 13
30 November (via WebEx)
Discussion: McDonald, *Pirates, Merchants, Settlers, and Slaves* (2015)

2 December
No class

Week 14
7 December (via WebEx)
Discussion, Sharman, *Empires of the Weak* (2019)

9 December (via WebEx)
Conclusions

Final Assessment: Date and format TBD.

The Seafarer by Ezra Pound

(From the early Anglo-Saxon text)

May I for my own self song's truth reckon,
Journey's jargon, how I in harsh days
Hardship endured oft.
Bitter breast-cares have I abided,
Known on my keel many a care's hold,
And dire sea-surge, and there I oft spent
Narrow nightwatch nigh the ship's head
While she tossed close to cliffs. Coldly afflicted,
My feet were by frost benumbed.
Chill its chains are; chafing sighs
Hew my heart round and hunger begot
Mere-weary mood. Lest man know not
That he on dry land loveliest liveth,
List how I, care-wretched, on ice-cold sea,
Weathered the winter, wretched outcast
Deprived of my kinsmen;
Hung with hard ice-flakes, where hail-scur flew,
There I heard naught save the harsh sea
And ice-cold wave, at whiles the swan cries,
Did for my games the gannet's clamour,
Sea-fowls, loudness was for me laughter,
The mews' singing all my mead-drink.
Storms, on the stone-cliffs beaten, fell on the stern
In icy feathers; full oft the eagle screamed
With spray on his pinion.
Not any protector
May make merry man faring needy.
This he little believes, who aye in winsome life
Abides 'mid burghers some heavy business,
Wealthy and wine-flushed, how I weary oft
Must bide above brine.
Neareth nightshade, snoweth from north,
Frost froze the land, hail fell on earth then
Corn of the coldest. Nathless there knocketh now
The heart's thought that I on high streams
The salt-wavy tumult traverse alone.
Moaneth alway my mind's lust
That I fare forth, that I afar hence
Seek out a foreign fastness.
For this there's no mood-lofty man over earth's midst,
Not though he be given his good, but will have in his youth greed;
Nor his deed to the daring, nor his king to the faithful
But shall have his sorrow for sea-fare
Whatever his lord will.
He hath not heart for harping, nor in ring-having
Nor winsomeness to wife, nor world's delight
Nor any whit else save the wave's slash,
Yet longing comes upon him to fare forth on the water.
Bosque taketh blossom, cometh beauty of berries,
Fields to fairness, land fares brisker,
All this admonisheth man eager of mood,
The heart turns to travel so that he then thinks
On flood-ways to be far departing.
Cuckoo calleth with gloomy crying,
He singeth summerward, bodeth sorrow,
The bitter heart's blood. Burgher knows not --
He the prosperous man -- what some perform
Where wandering them widest draweth.
So that but now my heart burst from my breast-lock,
My mood 'mid the mere-flood,
Over the whale's acre, would wander wide.
On earth's shelter cometh oft to me,
Eager and ready, the crying lone-flyer,
Whets for the whale-path the heart irresistibly,
O'er tracks of ocean; seeing that anyhow
My lord deems to me this dead life
On loan and on land, I believe not
That any earth-weal eternal standeth
Save there be somewhat calamitous
That, ere a man's tide go, turn it to twain.
Disease or oldness or sword-hate
Beats out the breath from doom-gripped body.
And for this, every earl whatever, for those

speaking after --
Laud of the living, boasteth some last word,
That he will work ere he pass onward,
Frame on the fair earth 'gainst foes his malice,
Daring ado, ...
So that all men shall honour him after
And his laud beyond them remain 'mid the
English,
Aye, for ever, a lasting life's-blast,
Delight mid the doughty.
Days little durable,
And all arrogance of earthen riches,
There come now no kings nor Cæsars
Nor gold-giving lords like those gone.
Howe'er in mirth most magnified,
Whoe'er lived in life most lordliest,
Drear all this excellence, delights undurable!
Waneth the watch, but the world holdeth.
Tomb hideth trouble. The blade is layed low.
Earthly glory ageth and seareth.
No man at all going the earth's gait,
But age fares against him, his face paleth,
Grey-haired he groaneth, knows gone
companions,
Lordly men are to earth o'ergiven,
Nor may he then the flesh-cover, whose life
ceaseth,
Nor eat the sweet nor feel the sorry,
Nor stir hand nor think in mid heart,
And though he strew the grave with gold,
His born brothers, their buried bodies
Be an unlikely treasure hoard.

2020-211 GEOG/GSCI 2310E Revise Course (guest: Julie Fosdick) (G) (S)

COURSE ACTION REQUEST	
CAR ID	20-16162
Request Proposer	Gillingham
Course Title	Creating and Sustaining Our National Parks
CAR Status	In Progress
Workflow History	Start > Geosciences > Geography > College of Liberal Arts and Sciences > Return > Geosciences > Geography > College of Liberal Arts and Sciences

COURSE INFO	
Type of Action	Revise Course
Is this a UNIV or INTD course?	Neither
Number of Subject Areas	2
Course Subject Area	GSCI
School / College	College of Liberal Arts and Sciences
Department	Geosciences
Course Subject Area #2	GEOG
School / College #2	College of Liberal Arts and Sciences
Department #2	Geography
Reason for Cross Listing	This course covers topics in both physical geography and geological sciences that pertain to both Geography and the Center for Integrative Geosciences.
Course Title	Creating and Sustaining Our National Parks
Course Number	2310
Will this use an existing course number?	Yes
Please explain the use of existing course number	The existing course number is still appropriate for this change request.

CONTACT INFO	
Initiator Name	Julie C Gillingham
Initiator Department	Geosciences
Initiator NetId	jcg16107
Initiator Email	julie.fosdick@uconn.edu
Is this request for you or someone else?	Myself
Does the department/school/program currently have resources to offer the course as proposed?	Yes

COURSE FEATURES	
Proposed Year	2021
Will this course be taught in a language other than English?	No
Is this currently a General Education course or is it being proposed for General Education?	Yes
Content Area 1 Arts and Humanities	No
Content Area 2 Social Sciences	No
Content Area 3 Science and Technology (non-Lab)	No

Content Area 3 Science and Technology (Lab)	No
Content Area 4 Diversity and Multiculturalism (non-International)	No
Content Area 4 Diversity and Multiculturalism (International)	No
General Education Competency	
Environmental Literacy	Yes
Number of Sections	1
Number of Students per Section	40-60
Is this a Variable Credits Course?	No
Is this a Multi-Semester Course?	No
Credits	3
Instructional Pattern	Three lectures per week

COURSE RESTRICTIONS	
Prerequisites	None
Corequisites	None
Recommended Preparation	None
Is Consent Required?	No Consent Required
Is enrollment in this course restricted?	No

GRADING	
Is this course repeatable for credit?	No
What is the Grading Basis for this course?	Graded

SPECIAL INSTRUCTIONAL FEATURES	
Do you anticipate the course will be offered at all campuses?	No
At which campuses do you anticipate this course will be offered?	Storrs
If not generally available at all campuses, please explain why	Only locations with Geosciences faculty
Will this course be taught off campus?	No
Will this course be offered online?	No

COURSE DETAILS	
Provide existing title and complete course catalog copy	GEOG 2310. National Parks Unearthed: Geology and Landscapes through Time Also offered as: GEOG 2310 3.00 credits Prerequisites: None. Grading Basis: Graded Geologic processes that shape the Earth's landscapes and interior through the study of National Parks, Monuments, and Seashores. Plate tectonics, climate and biotic change, natural hazards and resources, and environmental conservation.
Provide proposed title and complete course catalog copy	GEOG 2310E. Creating and Sustaining Our National Parks Also offered as: GEOG 2310E 3.00 credits Prerequisites: None. Grading Basis: Graded Geologic processes that create the Earth's iconic landscapes through the study of National Parks, Monuments, and Seashores. Plate tectonics, climate and biotic change, natural hazards, Earth materials and resources, environmental conservation, and the interactions between human society and the natural world.
Reason for the course action	Modification to course title and course description to better reflect course content, and add Environmental Literacy designation.
Specify effect on other departments and overlap with existing courses	None
Please provide a brief description of course goals and learning objectives	The overarching objective of this class is for students to gain the ability to interpret and explain the interactions among the physical, chemical, biological, and anthropogenic processes that create the Earth's landscapes as exemplified by protected lands. Along these lines, this course emphasizes important topics such as climate change, formation and preservation of natural resources, creation and management of protected lands, and understanding the interactions between humans and the natural world. By the end of the course, students will

	have (1) gained proficiency in critical judgement and evaluation of scientific data, (2) acquired a working understanding of the geologic processes operating within and across the natural world, (3) developed awareness of the rich history of the national park service and societal considerations for establishing protected lands. With this information, students will become better stewards of our natural lands and resources.
Describe course assessments	Assessment of student learning will include weekly quizzes administered and discussed in class via TopHat (15%), two midterm exams (40%), group project (15%), final exam (15%), and participation (15%). Weekly quizzes will assess general understanding of topics and reading assignments covered during the previous week. Two midterm exams will cover material covered in lecture and assigned readings. Both exams will be held in the regular classroom and are closed-book/notes/friend format. The final exam is cumulative and will be held during the scheduled final exam period (also closed book/notes/friend). Exam questions will be mostly multiple-choice/fill-in-the-blank and short-answer format. The goal of the group project is for students to delve deeper into a national park or monument of their choice to build a comprehensive understanding of the interactions between the park's iconic geology, natural resources, and history of land use and conservation practices. Working in groups of five to six classmates, students will work together to prepare a short (~15 minutes) PowerPoint summary of their work to be presented in class. Class participation is required and necessary to do well in this class! There will be classroom activities that require students to participate during class time. Participating in discussions promotes a more engaged and dynamic learning environment.
General Education Goals	GSCI/GEOG 2310 Creating and Sustaining Our National Parks spans a broad range of subject material that meets the goals of the General Education criteria in several ways. By the end of the course, students (1) gain proficiency in critical judgement and evaluation of scientific data, (2) acquire a working understanding of the geologic processes operating within and across the natural world. (3) develop awareness of the rich history of the national park service and societal considerations for establishing protected lands. This course was recently added to the Course Catalog in 2017, and serves the highest enrollment at the 2000-level offered by the Department of Geosciences. It has capacity and momentum to expand enrollment and provide students with an invaluable intersection between science and society.
Environmental Literacy	GSCI/GEOG 2310 Creating and Sustaining Our National Parks fosters Environmental Literacy by providing students with the ability to understand how geologic processes and human activities shape the Earth's landscapes, as exemplified in our national parks. During its development over the past three years, GSCI/GEOG 2310 has expanded to encompass more direct links between humans and the natural world. The focus throughout this class is to provide students with a better understanding of the geologic processes that shape the Earth, and our role as agents – of both change and sustainability – in land management and conservation. Where better than national parks, monuments, and seashores to discuss the interactions between human society and the natural world? In 2019, the 3.3 million visits to the over 400 national parks administered by the National Park Service highlight the opportunity and critical need to provide scientifically sound knowledge and informed dialogue about environmental issues. We cover a broad range of national parks, monuments, and seashores in this class (including regional and Connecticut state parks) to provide natural settings to be discovered through theoretically based inquiry, analytical thinking, and interpretation of empirical data. Along these lines, this course emphasizes important topics such as climate, formation and preservation of natural resources, and understanding the physical and natural world and our role as human agents of change. Specific intersections between geology and society include discussion of natural hazards and risk assessment as related to climate change, sea level rise, volcanism, erosion and landsliding, and environmental degradation related to development of natural resources. We also address issues such as land management policies as they relate to different models of federally protected and managed land. The specific course content may vary by instructor, but the course is broadly subdivided into two parts, each comprised of lectures and learning assessments that build knowledge and tools for environmental literacy. In general, Part 1 develops environmental literacy through discussion of theories, observations, or models of how the natural world affects human health and well-being (Criteria 2). With this foundational knowledge in hand, Part II further focuses on the complex interactions between human society and the environment by discussing how humans impact the health and well-being of the natural world (Criteria 1), public policies, legal frameworks, and/or social systems that affect the environment (Criteria 3), and the moral and/or ethical dimensions regarding the environment (Criteria 4). The attached document outlines course material and assessments with specific topics and associated environmental literacy criteria.
Syllabus and other attachments	

Attachment Link	File Name	File Type
GSCI-GEOG 2310E Proposal_Syllabus.docx	GSCI-GEOG 2310E Proposal_Syllabus.docx	Syllabus
GSCI-GEOG 2310E Proposal_GenEd E Justification.docx	GSCI-GEOG 2310E Proposal_GenEd E Justification.docx	Other
GSCI-GEOG 2310E Schedule.pdf	GSCI-GEOG 2310E Schedule.pdf	Other

COMMENTS / APPROVALS

Comments & Approvals Log

Stage	Name	Time Stamp	Status	Committee Sign-Off	Comments
Start	Julie C Gillingham	04/16/2020 - 15:15	Submit		Approved by GSCI and GEOG faculty and department C&C committees.
Geosciences	Clay Tabor	04/17/2020 - 09:59	Approve	4/17/2020	The proposed revisions to GSCI 2310 were reviewed and approved by the GSCI faculty.

	Geography	Carol Atkinson-Palombo	04/17/2020 - 13:45	Approve	4/7/2020	Approved by Geography C&C Committee: 4/7/2020; approved by unanimous faculty vote 4/8/2020.
	College of Liberal Arts and Sciences	Pamela Bedore	04/30/2020 - 15:42	Return		CLAS C&C tabled the proposal with notes to the proposer about the title and catalog copy. We will look forward to reviewing again in August. PB.
	Return	Julie C Gillingham	08/05/2020 - 14:04	Resubmit		Based on feedback from April 2020 CLAS C&C meeting, we revised the catalog copy to more clearly describe the course content on the relationship between geologic processes, park landscapes, and human interactions with the environment.
	Geosciences	Jean M Crespi	08/06/2020 - 16:36	Approve		Approved by Chair of Geosciences C&C Committee.
	Geography	Debarchana Ghosh	09/02/2020 - 13:32	Approve	9/2/2020	Approved by Geography C&C Committee: 9/2/2020; approved by unanimous faculty vote 9/2/2020.

Creating and Sustaining Our National Parks
GSCI 2310E / GEOG 2310E

Syllabus

Time: M-W-F 11:15 am – 12:05 pm	**Class Location: Austin 110**
Instructor: Prof. Julie Fosdick	Office: **Beach Hall 325**C
Email: julie.fosdick@uconn.edu	Office Hours: **TBA**

Course Description

Three credits. Geologic processes that create the Earth's iconic landscapes through the study of National Parks, Monuments, and Seashores. Plate tectonics, climate and biotic change, natural hazards, Earth materials and resources, environmental conservation, and the interactions between human society and the natural world.

Course Learning Goals

The overarching objective of this class is for students to gain the ability to interpret and explain the interactions among the physical, chemical, biological, and anthropogenic processes that shape the Earth's landscapes as exemplified by protected lands. Along these lines, this course emphasizes important topics such as climate change, formation and preservation of natural resources, creation and management of protected lands, and understanding the interactions between humans and the natural world. By the end of the course, students will have (1) gained proficiency in critical judgement and evaluation of scientific data, (2) acquired a working understanding of the geologic processes operating within and across the natural world. (3) developed awareness of the rich history of the national park service and societal considerations for establishing protected lands. With this information, students will become better stewards of our natural lands and resources.

Course Requirements

Required reading and resources

We will draw upon background material and contemporary readings from a diverse range of resources. Required resources are listed below. Assigned readings provide a more thorough

background on concepts covered in class. Readings should be completed prior to the class session listed in the schedule. You are responsible for keeping up with all reading assignments.

- Parks and Plates: The Geology of Our National Parks, Monuments, and Seashores by Lillie (2005). Textbook can be purchased at the UConn Bookstore.
- Earth: Portrait of a Planet 5th edition by Marshak (2017). Selected readings will be provided to students on the course HuskyCT site.
- The National Parks: America's Best Idea - A film by Ken Burns. Selected videos and reading assignments are available online.
- Future of Conservation in America by Michlis and Jarvis (2018). Textbook can be purchased at the UConn Bookstore.

Other required resources for class include reliable internet access, Adobe Acrobat Reader, and Word and PowerPoint processing software. Students are encouraged to bring a ruler, calculator, and multi-colored pencils to class and exams.

Top Hat: We will use the Top Hat (www.tophat.com) classroom response platform. You may submit answers to in-class questions using Apple or Android smartphones, tablets, or laptops. Registration requires a subscription fee for unlimited access across all courses. *Students whom are financially burdened by this fee can request a waiver by speaking with the instructor as soon as possible.*

Class participation

Class participation is required and necessary to do well in this class! There will be classroom activities that require you to participate during class time. Participating in discussions promotes a more engaged and dynamic learning environment – This is your educational experience, so please show up with an open and engaged mind. Ask questions and visit office hours as needed. ***Make-up of missed classroom activities are allowed only with Instructor approval for excusable absences.***

Learning Assessments

Short online quizzes will be given at the beginning of many classes to assess general understanding of topics and reading assignments covered during the previous week. Answers will be discussed as a class. Quizzes consist of up to three short questions to help you check your understanding of class concepts and prepare for the exams. Quizzes are graded for both correctness and participation, with multiple attempts allowed.

Exams

Two midterm exams will cover material covered in lecture and assigned readings. Both exams will be held in the regular classroom and are closed-book/notes/friend format. The final exam is cumulative and will be held during the scheduled final exam period (also closed book/notes/friend). Scantron forms will be provided. Exam questions will be mostly multiple-choice/fill-in-the-blank and short-answer format. ***Makeup exams will be available for only students with excusable absences and/or prior instructor approval. Check your schedule and note the exam times!***

Group Project: A Walk in the Park

The goal of the class project is for you to delve deeper into a national park or monument of your choice to build a comprehensive understanding of the interactions between the park's iconic geology, natural resources, and history of land use and conservation/protection practices. The scope of the project is loosely mirrored after natural resource assessment reports for protected lands, and students are guided to develop a report on the park's (1) underlying geology and geographic setting, (2)

natural resources and hazards, and (3) environmental protection and/or conservation history. Working in groups of five to six classmates from different disciplinary backgrounds, you will prepare a short (~15 minutes) PowerPoint summary of your 'natural resource and hazard assessment report' to be presented in class near the end of the semester.

Course Assessment and Grades

Assessment of student learning will include weekly quizzes administered and discussed in class via TopHat (15%), two midterm exams (40%), group project (15%), final exam (15%), and participation (15%). Course grades are determined as follows: #0–#2.99 = Letter minus (e.g., 82.99 = B-), #3–#6.99 = Solid letter (e.g., 86.99 = B), #7–#9.99 = Letter plus (e.g., 89.99 = B+). *Note that the University does not offer A+ grade*

Class Policies

Technology in the classroom

Always bring a notebook and writing implement to every class. In addition to PowerPoint lecture slides, we will sketch diagrams and graphs on the whiteboard. You are permitted to take pictures of the whiteboard diagrams, but writing/drawing them out is good practice for exam preparation. Colored pens/pencils and a ruler are useful as well.

You are allowed use of smartphones, tablets, and laptops during class for use with Top Hat and taking lecture notes response system and note taking. Any disruption to class or lack of engagement/participation (phone calls, texting, Facebook, YouTube, BBC News, etc.) will negatively affect your participation grade in class.

Absences and Make-up Work

Students are responsible for all lecture material, assignments, and exams. *Arrangements for make-up work (assignments, exams, quizzes) are permitted only with Instructor's approval for absences arranged in advance and for medical emergencies or other University approved situations.* If there is an absolutely unavoidable circumstance, it is your responsibility to notify the Instructor by email as soon as possible. Please note that vacations, previously purchased tickets or reservations, social events, misreading the exam schedule and over-sleeping are not viable excuses for missing an exam. If you think that your situation warrants permission to reschedule, please contact the Dean of Students Office with any questions. Thank you in advance for your cooperation.

Academic Accommodations for Students with Disabilities

Please contact me to discuss academic accommodations that may be needed during the semester due to a documented disability. The Center for Students with Disabilities (CSD) www.csd.uconn.edu engages in an interactive process with each student and reviews requests for accommodations on an individualized, case-by-case basis. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu.

Academic Integrity

Cheating and plagiarism on exams or any other work will not be tolerated. As a student at UConn, you are expected to adhere to the standards and policies detailed in the *Responsibilities of Community Life: The Student Code*. When you submit an assignment with your name on it, you are signifying that the work contained therein is all yours, unless otherwise cited or referenced. If you have any

questions, please ask, or see the student code of conduct at http://community.uconn.edu/. All suspected violations of the *Code* will be handled according to University policies.

And finally, please be respectful of your instructor and fellow students in the classroom. Disruptive behavior in class will not be tolerated. Be courteous and respectful to all!

******Course syllabus subject to changes with advanced notice by the Instructor. The most current version will be posted to the course HuskyCT website******