

BME 6430/NEUSC 6050 Systems Neuroscience

Course Description and Syllabus

Spring 2021
Gregory A. Clark
v210107-0918-gac

1. OVERVIEW

Course Director:	Gregory Clark: Greg.Clark@utah.edu , (801) 585-9796, 506F BPRB
Co-Instructor:	Alessandra Angelucci (vision module): Alessandra.Angelucci@hsc.utah.edu , (801) 585-7489 (office); Moran Eye Center, Room N5420
Guest Lecturers:	Matt Wachowiack (taste & smell); Karen Wilcox (epilepsy); Brian Mickey (mood and thought disorders)
Format:	Lecture, discussion
Credit Hours:	4
Readings:	Kandel et al., <i>Principles of Neuroscience</i> (5 th ed), 2013. New York: McGraw Hill. ISBN 978-0-07-139011-8. (Pdf version is also available.) Also, papers for discussion to be assigned from the primary scientific and engineering literature.
Meetings:	T,H 10:45 AM-12:05 PM (lecture). F 12:55 PM-1:45 PM (discussion).
Format¹:	Mostly or entirely “Interactive Video Conferencing” (IVC), especially at the beginning of the course. If “in-person,” place tbd. Lectures also may be recorded and posted on Canvas. Subject to change. Further information below.
Grading:	One overall grade will be assigned for the course, based on performance in both lecture and discussion. Exams (lecture): ~75%. Assignments, presentation, and class participation (discussion): ~25%.
Office Hours:	Thu after class, or by appointment.

¹Format

As per University course-format definitions:

- “**IVC**” formats meet in real time, thereby allowing “synchronous” remote interactions.
- “**Online**” formats (in this restricted sense) post the majority of information “online” to be used at unspecified “asynchronous” times of students’ choosing.
- “**Hybrid & IVC.**” This is the presently listed designated format on the registrar class schedule web site. What this designation will mean in practice is that we will often (or perhaps entirely) conduct the course in IVC mode, at least to start with. We may later switch to some in-person meetings if circumstances allow. As noted, some materials will also be posted online for asynchronous viewing. However, attendance in real time is the default expectation—especially for discussion. Interactive, real-time participation is necessary for discussions to be meaningful.
- Lecture and discussion formats may change with changing COVID-19 circumstances, instructor preferences, and other circumstances.

Course Description & Objectives

BME 6430/NEUSC 6050 Systems Neuroscience (4) Cross-listed.

The nervous system exhibits an extraordinary capability for information processing, storage, and acquisition, much of which emerges from the interactions of systems of neurons. This course will explore systems-level functions and dysfunctions of the nervous system from a scientific and engineering perspective, beginning with issues of sensory coding and motor control, and expanding into issues of homeostasis, arousal, cognitive and mood disorders, and experience-dependent modifications of neuronal operations. Lectures will consist primarily of lectures by the faculty. Discussions sections will consist primarily of student-led and interactive discussion of primary literature associated with lecture topics, with active participation of the audience.

Designations

- *For BME graduate students:* One of the life science fundamental courses of the core curriculum.
- *For Interdepartmental Program in Neuroscience graduate students:* Required core course.
- *For BME undergraduate students:* A pre-approved elective, but requires instructor's permission.

Prerequisites

Instructor permission.

This a graduate-level course. Select undergraduate students may be admitted with appropriate justification and permission. We will presume that all students already know the basics of cellular neuroscience, and we will not review those subjects in any depth. Some prior experience with systems neuroscience may also prove helpful. Further information about appropriate background, expectations and levels of instruction are available from the course director, G. Clark.

General Education

This course does not satisfy a general education requirement.

Cross-Listing

This is a cross-listed course. Requirements are the same for both course numbers.

Objectives

At the end of this course, students will have a working knowledge of, and will be able to analyze critically:

- Systems neuroscience topics that are indicated in the syllabus schedule and readings, ranging from sensory and motor systems to more complex cognitive phenomena
- How systems neuroscience properties arise from underlying cellular and molecular mechanisms
- Relevance and applications for translational neuroscience and neuroengineering

Note to users:

The back part of the syllabus (following the Schedule) contains substantive amounts of information. Some information is course-specific; students should review and understand this content. Other information addresses standard, required information about University policies, resources, and the like. You may already be familiar with much of this information from other syllabi or other sources.

*Using the Navigation Pane (available in the View tab) in Word or the Bookmark feature in Adobe (pdf) is useful for navigating this document and for skipping to useful sections such as **"2. Schedule, BIOEN 6430/NEUSC 6050 Systems Neuroscience"** (Ctrl+Click to follow cross-reference links.) Collapsing and expanding headers can also be useful.*

2. SCHEDULE

Session	Topic	Reading/ Assignment
	Week 1	
01. T 1/19	Lec01. Systems Neuroscience: Overview & Selected Principles (Greg Clark, GC)	Kandel et al. (*K) 1; 60.*
02. H 1/21	Lec02. Somatosensory 1: Transduction and Peripheral Mechanisms (GC)	K 16; 21; 22
03. F 1/22	Dis01. Introduction & Organization; Somatosensory (GC)	TBA
	Week 2	
04. T 1/26	Lec03. Somatosensory 2: Central Mechanisms (GC)	K 17:370-384; 23; 66:1483-1484
05. H 1/28	Lec04. Somatosensory 3: Central Mechanisms (GC)	K 24
06. F 1/29	Dis02. Somatosensory (GC & student TBA)	TBA
	Week 3	
07. T 2/2	Lec05. Auditory and Vestibular 1: Transduction & Peripheral Mechanisms (GC)	K 30; 31; 40 (to be cont'd)
08. H 2/4	Lec06. Auditory and Vestibular 2: Central Processing (GC)	K 30; 31; 40 (cont'd); 56 (cont'd):1275-1283
09. F 2/5	Dis03. Audition. (GC & student TBA)	TBA
	Week 4	
10. T 2/9	Lec07. Vision 1: Phototransduction and Retinal Information Processing (Alessandra Angelucci, AA)	K 25; 26
11. H 2/11	Lec08. Vision 2: Central Pathways & Developmental Plasticity (AA)	K 27; 56:1259-1275
12. F 2/12	Dis04. Vision (AA & student TBA)	TBA
	Week 5	
13. T 2/16	Lec09. Vision 3: Higher-Order Visual Processing (AA)	K 20:433-437; 28; 29
14. H 2/18	Lec10. Taste &/or Olfaction (Matt Wachowiak)	K 32
15. F 2/19	Dis05: Chemical Senses (MW, GC & student TBA)	TBA
	Week 6	
16. T 2/23	Lec11. Review	Review
17. H 2/25	Lec12. Exam1 , Sensory Systems	Review
18. F 2/26	Dis06: Independent study	TBA
	Week 7	
19. T 3/2	Lec13. Spinal Reflexes & Locomotion 1 (GC)	K 33; 35; 36
20. H 3/4	Lec14. Spinal Reflexes & Locomotion 2 (GC)	K 35; 36 cont'd
21. F 3/5	Dis07. No Discussion —"Non-Instructional Day"	TBA
	Week 8	
22. T 3/9	Lec15. Voluntary Control 1 (GC)	K 37; 38
23. H 3/11	Lec16. Voluntary Control 2 (GC)	K 37; 38 cont'd
24. F 3/12	Dis08. Motor Systems 1 (GC & student TBA)	TBA
	Week 9	
25. T 3/16	Lec17. Basal Ganglia (GC)	K 43
26. H 3/18	Lec18. Cerebellum (GC)	K 42
27. F 3/19	Dis09. Motor Systems 2 (GC & student TBA)	TBA
	No Spring Break 2021, by Univ. Scheduling	

Session	Topic	Reading/ Assignment*
	Week 10	
28. T 3/23	Lec19. EXAM 2 , Motor Systems	Review
29. H 3/25	Lec20. Overview of Regulatory, Modulatory, Motivational, & Emotion Systems (GC)	K 46:1038-1051; 48
30. F 3/26	Dis10. Regulatory Systems et al. (GC & TBA)	TBA
	Week 11	
31. T 3/30	Lec21. Autonomic Nervous System (GC)	K 47
32. H 4/1	Lec22. Hypothalamus: Temperature, Sex (GC)	K 47 (cont'd); 49, 58
33. F 4/2	Dis11. ANS/Hypothalamus (GC & student TBA)	TBA
	Week 12	
34. T 4/6	Lec23. EEG, Circadian Rhythms (GC)	K 46:1038-1040 (repeat); Box 50-1; 51; Ch 3, p47; 51-53
35. H 4/8	Lec24. Epilepsy (Karen Wilcox)	K 50
36. F 4/9	Dis12. Epilepsy (GC, & student TBA)	TBA
	Week 13	
37. T 4/13	Lec25. Long-Term Potentiation & LT Depression (GC)	K 67
38. H 4/15	Lec26. Long-Term Potentiation: Behavior (GC)	K 65:1441-1452; 67 (cont'd)
39. F 4/16	Dis13. EEG, Sleep, or LTP (GC & student TBA)	TBA
	Week 14	
40. T 4/20	Lec27. Neural Mechanisms of Learning & Memory 1 (GC)	K 48 (repeat), 65 (partial repeat); 66:1478-1485
41. H 4/22	Lec28. Neural Mechanisms of Learning & Memory 2: (GC)	K 66:1461-1478
42. F 4/23	Dis14. Neural Mechanisms of Learning & Memory (GC & student TBA)	TBA
	Week 15	
43. T 4/27	Lec29. Mood & Thought Disorders (Brian Mickey)	K 62; 63
44. F 4/30	Lec30. Final Exam. 10:30-12:30. <u>Note different day & time from usual class.</u> Place TBD. (Time & place subject to change.)	Review

*"K" refers to Kandel et al., Principles of Neural Science, 5th ed., 2013, followed by chapter number and page numbers, as appropriate. E.g., "K 1; 60" means Kandel et al., Chapters 1 and 60.

Additional readings or assignments may be given throughout the course. Schedule subject to change. Some or all notes and assignments may be posted on Canvas, or emailed, or handed out in class.

3. COURSE-SPECIFIC GUIDELINES AND POLICIES

Required Materials

Ensure that you have these required materials ahead of time. They will be required to complete assignments and activities throughout the course. Students should familiarize themselves with Canvas and any other electronic teaching tools we may use. All class materials will be accessible online.

Textbook, Readings, & Assignments:

- Kandel et al., *Principles of Neuroscience* (5th ed), 2013. New York: McGraw Hill. ISBN 978-0-07-139011-8. (Pdf version is also available.)
- Papers for discussion to be assigned from the primary scientific and engineering literature.
- Selected readings and web materials to be assigned.

Hardware: Computer, webcam & microphone; scanner

A computer, webcam and microphone will be necessary to access videos and to participate in on-line course activities. Scanning capabilities will be necessary to convert assignments, etc. to pdfs prior to uploading to Canvas. Good scanning applications on smartphones (including but not limited to Adobe) will suffice.

Applications:

- *Canvas* (via web browser)
Most course materials outside of the textbook will be posted on the web, either at the University's Canvas site or elsewhere as indicated. Access Canvas through the U's CIS system. The [Canvas Getting Started Guide for Students](#) can be helpful.
 - *Respondus LockDown Browser* (possibly). A custom add-on browser that launches Canvas exams, locks down the testing environment, and prevents access to other applications. See information to be provided later.
 - *ProctorU* (possibly). Remote Exam Monitoring add-on to Canvas exams. See information to be provided later.
- *Microsoft Office Suite* (e.g., Word, Excel, PowerPoint) may be necessary or at least useful.
- *Adobe* (or other pdf converter and reader). You will have to read *.pdf documents and convert documents and assignments to *.pdf for uploading to Canvas.

Student Assessment Tools, Criteria, And Standards

- Written exams
- Written assignments for discussion sessions
- In-class presentations and participation

Lecture: ~75% of overall course grade, determined primarily by exams, although assignments, attendance, and participation may also factor in.

Discussion: ~25% of overall course grade.

Attendance and participation in the Discussion sessions are especially required and may factor into course grades. Discussion sessions will be led by students (scheduled at the beginning of the semester) who will assist in choosing articles from the scientific or engineering literature, and who will lead the discussion of the paper. Other students are expected and required to participate actively in the discussion, and may be called upon. Socratic pedagogic approaches of interrogation may be used to facilitate critical thinking and independent analysis.

Exams: There will be two or three exams during the semester, including one final exam at semester's end. Each exam including the final will not be comprehensive and will cover only material presented since the previous exam. Exams cannot be rescheduled except in cases of documented emergencies.

Exams may be administered remotely. The university provides computers and a distraction-free exam space they can schedule if needed.

Assignments: Reading, homework, and other assignments are listed on the course schedules.

Additional assignments not listed in the syllabus may be given throughout the semester. Each discussion meeting will require an advance “ticket of admission” written analysis of the paper.

Standards and overall course letter grades: Although a curve will likely be used, we will also consider using standard percentage cutoffs for course letter grades ($\geq 94.0\%$ = “A”; 90-93.999% = “A-”; 87.0-89.999 = “B+”; etc.), based on students’ overall weighted course point percentages associated with the above assessment tools.

However, as in past years, a curve may and probably will be applied in order to *improve* overall course letter grades, compared with letter grades associated with the above cutoffs. For example, if 89% is the top student score, it would probably be assigned an “A” instead of a “B+”.

In contrast, curves will *not* be applied to *decrease* course letter grades. We would be delighted to give everyone an “A” if everyone truly masters the material thoroughly, and achieves 95% of all possible weighted course points. Typically there is a wider distribution, with the median aggregate course point percentage receiving approximately a “B+”.

Because we won’t curve downward, it can be both beneficial and more enjoyable for you to help each other learn the material. We encourage you to do so. Note, however, information herein on plagiarism regarding written assignments.

Instructor and Course Assessment Procedures

- Student evaluation of teaching
- Student evaluation of course
- Yearly outside evaluation of course by other University professors

Instructor Availability

Dr. Clark will be available during his scheduled regular office hours (see above), after most lecture sessions, and by appointment. We realize that many students’ schedules are highly constrained and may not allow students to meet during our scheduled regular office hours. In such cases, we encourage you to arrange alternative times to meet with us to discuss any questions or issues associated with the course, or beyond.

Student Contact Information

So that we are able to contact or reply to you, please

- 1) **Use your University e-mail account** rather than another, personal e-mail account (e.g., gmail) for contacting instructors. Otherwise, because of FERPA privacy requirements, we may not be able to reply. Contacting Greg Clark directly via email or otherwise (instead of through Canvas) is usually more efficient for time-sensitive responses.
- 2) Set your UU e-mail account so that it is the account that you actually use and check, or so that it forwards emails to the account that you actually do use and check, and so that messages to your U-account don’t go unnoticed.
- 3) Set the options in your Canvas account to forward the Canvas emails to your U e-account.

Web Canvas Postings

Many course materials will be posted on the University’s Canvas site, including papers for discussion, and most lecture notes. We will often e-mail you from the Canvas system to inform you of postings so that you don’t have to keep checking. Appropriate settings will allow you to be notified automatically.

On Canvas, both BIOEN 6430/NEUSC 6050 cross-listings will be subsumed under a single Canvas site/course. Having a single, combined section on Canvas allows interactions among all students and avoids differences in postings, so that we can all be part of the same course.

Course Guidelines And Policies

The course will be conducted according to the policies and procedures of the University of Utah, the College of Engineering (COE), the Department of Biomedical Engineering (BME), the Interdepartmental Program in Neuroscience, and specific policies of the course.

Academic actions of instructors, including but not necessarily limited to grading, sanctions for academic misconduct, decisions regarding content accommodation requests, etc., are subject to appeal.

See COE links below and associated and additional documents and policies for particulars:

<https://www.coe.utah.edu/students/current/semester-guidelines/>

<https://www.coe.utah.edu/students/academic-affairs/>(Academic Affairs web page)

Students will be required to communicate in writing their understanding and agreement with policies.

By University policy, “[f]aculty members must, at the beginning of a course, give reasonable notice to students of ... what will be required of the students, and the criteria upon which their performance will be evaluated...” (PPM 6-316, Section 4.B. Duties to Students, item 4

<https://regulations.utah.edu/academics/6-316.php>). Accordingly, selected University, COE, BME, course, and instructor policies and practices are elaborated below.

Attendance

Attendance at lectures and **especially discussion sessions is required** except for absences explicitly excused by a faculty course instructor (preferably in writing) or for officially sanctioned University activities or other circumstance indicated by University Policy (e.g., University Policy 6-100, Section O; <https://regulations.utah.edu/academics/6-100.php>). Students are responsible for all material presented in lecture, regardless of their attendance or availability of the information elsewhere. **Attendance may be taken, particularly for Discussion sections. Unexcused absences may be penalized via grade reductions**, particularly for discussion sessions. Unless explicitly indicated by a faculty instructor (preferably in writing) or University Policy, all assignments remain due according to the standard schedule, even in the event of excused absences.

Late Policy

Except in cases of legitimate, compelling extenuating circumstances, the late policy for assignments, including but not necessarily limited to homework assignments or papers, etc., will be as follows:

- **“On time”:**
Electronic submissions: Most or all lecture homework assignments or discussion section assignments should be turned in via Canvas by the specified time.
 - *Electronic submissions:* typically, will be due **15 min before** the start of the lecture or discussion period indicated.
- **“Late”: 10% grade penalty, or one letter grade:**
 - *Electronic submissions.* 15 min before start of next normally scheduled meeting. Late assignments typically may not be allowed for “tickets of admission” for Discussion sessions, which would defeat the purpose of being prepared for the discussion.
- **“Not accepted”:** Assignments not turned in by the late period will not be accepted except under extraordinary extenuating circumstances.

Academic Conduct

All students in this course, regardless of the cross-section in which they are enrolled, are required to read and agree to the Department of Biomedical Engineering Policy Statement of Academic Misconduct and to sign the associated Student Acknowledgment Form. All work for this course, including exams, assignments, and presentations, must be completed in keeping with the University of Utah Policy 6-400: Code of Student Rights and Responsibilities (“Student Code”), available at <http://regulations.utah.edu/academics/6-400.php>, and the BME Department Policy Statement on Academic Misconduct <https://www.bme.utah.edu/documents/2019/07/bme-misconduct-policy.pdf>.

As defined in the Student Code (section I.B.),

“Academic misconduct’ includes, but is not limited to, cheating, misrepresenting one’s work, inappropriately collaborating, plagiarism, and fabrication or falsification of information, as defined further below [see Student Code]. It also includes facilitating academic misconduct by intentionally helping or attempting to help another student to commit an act of academic misconduct.”

A primary example of academic misconduct is plagiarism: submitting as one’s own, work that is copied from an outside source. Other examples include cheating, such as copying from another student’s examination, or sharing or studying from past exams that were not meant for public distribution; and fabrication or falsification of information, such as fabricating data for a laboratory report or class project.

Science and engineering strive to uncover truth, discover new approaches, and create novel inventions and scholarship. Academic misconduct is antithetical to these goals, as well as to the goal of mastering new materials and skills. Academic misconduct will not be tolerated in this course, just as it is not tolerated in a professional scientific or engineering setting.

Academic misconduct may result in reduced grades and/or disciplinary action and written notification to the student's home Department, College and/or Program, as well as dismissal from the Biomedical Engineering Department, particularly in cases of repeat occurrences.

Accommodations (General)

Accommodations will be considered on an individual basis and may require documentation. Please contact your instructor and/or teaching assistant as soon as possible (preferably shortly before the semester begins) to request accommodations of any kind.

University policy specifies three qualitatively different types of accommodations: 1) scheduling accommodations, 2) legislated accommodations for disabilities, and 3) course-content accommodations, which are covered by separate, different policies as elaborated below.

1. Scheduling Accommodations

Scheduling accommodations include accommodations for two types of absences: 1) those explicitly listed in Policy 6-100.III.O, <https://regulations.utah.edu/academics/6-100.php>, related to absences for "officially sanctioned University activities (e.g., band, debate, student government, intercollegiate athletics), or government obligations (e.g., military duty), or religious obligations, or with instructor's approval;" and 2) those absences caused by other compelling reasons, beyond a student's control, such as: physical or mental illness; injury; death or illness in family or significant other; involuntary job change (such as a time, day, or location change).

See also

<https://regulations.utah.edu/academics/guidelines/G6100%20Guidelines%20for%20Accommodating%20Absences%20-%20July%208%202016.pdf> (July 2016 document)

Religious Practices

To request an accommodation for religious practices, **contact your instructor at the beginning of the semester.**

Active Duty Military

If you are student on active duty with the military and experience issues that prevent you from participating in the course because of **deployment or service responsibilities, contact your instructor as soon as possible** to discuss appropriate accommodations.

Extreme Personal Circumstances

Please **contact your instructor as soon as possible** if an extreme personal circumstance (e.g., hospitalization, death of a close relative, natural disaster, etc.) is interfering with your ability to complete your work.

2. Disability Access and Legislated Accommodations

All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services (CDS). CDS will work with you and the instructor to make arrangements for accommodations. Prior notice is appreciated. To read the full accommodations policy for the University of Utah, please see Section Q of the [Instruction & Evaluation regulations \(Links to an external site.\)](#).

If you will need accommodations in this course, contact:

Center for Disability Services

801-581-5020

disability.utah.edu (Links to an external site.)

162 Union Building
200 S. Central Campus Dr.
Salt Lake City, UT 84112

See also “**5.7. Americans with Disabilities Act (ADA)**” section below (Ctrl+Click to follow link).

3. Course-Content Accommodations

University-level Policies and Statements

The University’s Office of Academic Affairs has recommended the inclusion of the following statement (slightly modified):

“Please review the syllabus to determine whether the content of the course or assigned readings conflict with any of your core beliefs. If you do see such a conflict, you may choose to drop the class, with no penalty, before the last day to drop courses. Please feel free to set up a time to discuss concerns regarding course content with the relevant faculty course instructor. For more information about the university’s content accommodation policy, visit <http://regulations.utah.edu/academics/6-100.php> (Section Q).”

Possible conflicts in this course may involve but are not necessarily limited to viewing, reading about, discussing, or performing assignments regarding animal and human physiological structures and functions. Students’ requests for a content accommodation shall follow the procedures indicated in the University’s Accommodation Policy (e.g., Q.3.c. et al.). Instructors shall follow the procedures and criteria outlined in the Accommodations Policy (e.g. section Q.3.d. et al.).

The Department of Biomedical Engineering (formerly “Bioengineering”) has adopted the following:

“None of the following, either singularly or in combination, is sufficient grounds for requesting a content accommodation:

- a. personal disagreement with legitimate course content or its implications;*
- b. conflict between a student’s beliefs and legitimate course content or its implications;*
- c. any burden imposed on a student’s beliefs by legitimate course content or its implications.*

Accommodations requested on such grounds, either singularly or in combination, will not be granted.”

Students’ requests for a content accommodation shall follow the procedures indicated in the University’s Accommodation Policy (e.g., Q.3.c. et al.):

“It is the student’s obligation to determine, before the last day to drop courses without penalty, when course requirements conflict with the student’s sincerely-held core beliefs. If there is such a conflict, the student should consider dropping the class. A student who finds this solution impracticable may request a content accommodation from the instructor. Though the University provides, through this policy, a process by which a student may make such a request, the policy does not oblige the instructor to grant the request, except in those cases when a denial would be arbitrary and capricious or illegal. This request must be made to the instructor in writing, and the student must deliver a copy of the request to the office of the department Chair, or, in the case of a single-department college, to the office of the Dean. The student’s request must articulate the burden the requirement would place on the student’s beliefs.”

Instructors shall follow the procedures and criteria outlined in the Accommodations Policy (e.g. section Q.3.d. et al.), including but not limited to the following:

“Instructors are not required to grant content accommodations, as long as the subject course requirement has a reasonable relationship to a legitimate pedagogical goal, but they may do so, only if a reasonable alternative means of satisfying the curricular requirement is available and only if that alternative is fully appropriate for meeting the academic objectives of the course... In considering whether or not to make an accommodation, the faculty member may evaluate the sincerity but not the validity of the student’s belief... [A]ccommodations granted

by an instructor in one course will not affect decisions...by other instructors in the same or other courses."

Instructor-specific Approaches

Dr. Clark will not grant content accommodation requests. In accordance with university policy (PPM 6-316, Section 4.B.4), he hereby informs you of his approach in order to "give reasonable notice to students of...what will be required." Having a uniform practice for all students and requests ensures that instructors' decisions are not "arbitrary and capricious" and that all students and requests are treated equitably, which students can observe directly for themselves. Additionally, this approach obviates questions as to whether or not any alternative exercise is equitable on a work-load and educational basis, relative to the original exercise that other students remain required to do.

Other Course Changes and Types of Accommodations

Not all changes to course content trigger the use of the Content Accommodations Policy. Only student requests for content accommodations based on conflict with sincerely-held core beliefs trigger the use of this policy. Thus, for example, instructors can continue to be able to make modifications to course content for pedagogical reasons, such as adding or substituting a new reading, that are independent of the Content Accommodation Policy. However, those other reasons may not be used as a sham pretext for providing or not providing a content accommodation.

Content accommodations are officially different from scheduling accommodations and from accommodations for disabilities, which are covered by different policies (see below).

Student Names & Personal Pronouns Statement

Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered in the Student Profile section of their CIS account). Faculty instructors in this course will attempt to use your preferred name and pronouns. Please advise us of any name or pronoun preferences or changes (and update CIS) to help us do so.

Other

See also additional resources and information in the latter parts of the syllabus for University-wide statements, policies, and resources.

Changes to Syllabus

The enclosed information represents a plan, not a legal contract. Topics, dates, assignments and other content are subject to change at instructors' discretion. Students will be given reasonable notice of such changes.

4. UNIVERSITY ONLINE (& IVC) EXPECTATIONS

Note to users:

Although this course is not designated “online” overall in the U’s terminology, it will have web-based components. The following information is mostly from University guidelines and hence may already be familiar to you.

4.1. UOnline (and IVC) Student Expectations

Although the online format allows students greater flexibility to complete their work, this course does have a structure and timeline. The following is expected of all students in this class:

- Students must be **self-motivated, organized, and willing to stay on top of their schedule.** Students should take control of their learning while in this course.
- Students are expected to **follow the [Core Rules of Netiquette \(Links to an external site.\)](#)** at all times while participating in the class and communicating with others.
- Students will **log in** to the course a minimum of **3 times per week.**
- Students are **not expected to interact with their classmates in person.** Students **may be expected to work with classmates via online communication** options like Canvas Discussions, video conferencing, or another communication technologies of choice (Groupme, FaceTime, Google Hangouts, etc).
- Students will **regularly check for course updates** and will **update their Canvas notification settings** to ensure they receive timely notifications from the course.
- Students will **contact their instructor or teaching assistant** in a timely manner if they have any **questions**, are **struggling** with course materials, or **need further assistance** from their instructor.
 - If you do not hear back within 3 days after sending a message, please contact your instructor/TA again.
- Students will **follow all official University of Utah policies** regarding interpersonal conduct, academic dishonesty, and other rights and responsibilities of students outlined in the [University of Utah Student Handbook \(Links to an external site.\)](#) and [Code of Student Rights and Responsibilities \(Links to an external site.\)](#).
 - If you have any questions about this, please contact the [Dean of Students \(Links to an external site.\)](#).

4.2. Online (and IVC) Instructor Expectations

According to University evaluations, your course instructors are expert in the topics that you will learn about this semester. Your instructors are your mentors and facilitators of the classroom experience, aided by teaching assistants. Instructors are committed to the following:

- The instructor will design the course to **include lectures, learning materials, and assignments that are accessible** and provide students with **opportunities to learn** and practice course content.
- The instructor and teaching assistants will ensure that the **course remains a safe space** where students can engage with difficult content thoughtfully and respectfully.
- The instructor and teaching assistants will **interact with the class regularly** via announcements, virtual office hours (one-on-one video conferencing), emails/the Canvas Inbox, feedback on assignments, and comments on Discussions, among other methods.

- The instructor and teaching assistants will **respond to students in a timely manner**: within 48 hours, not including weekends and holidays.
- The instructor and teaching assistants will be **available for individual consultation** via virtual office hours (one-on-one video conferencing), email, or phone and **will not require students to meet in person**.
- The instructor and teaching assistants will **provide relevant feedback in a timely manner**.
- The instructor and teaching assistants will **follow all official University of Utah policies** regarding interpersonal conduct, accommodations, and other important duties.

5. UNIVERSITY POLICIES

Note to users:

Except for possible minor modifications or additions of references to other sections elsewhere in the syllabus (e.g., as in subsection 5.3., Plagiarism and Cheating below), the information below is copied from University template syllabus and other University sources and hence is common to many courses. Hence, much of this information may already be familiar to you. It is repeated here for student convenience and ready availability.

5.1. COVID-19 Campus Guidelines

Students are required to self-report if they test positive for COVID-19. To report, please contact:

COVID-19 Central @ The U

801-213-2874

coronavirus.utah.edu (Links to an external site.)

To reduce the spread of COVID-19 on campus, **face coverings are required in all in-person classes for both students and faculty.**

Based on CDC guidelines, the University requires everyone to wear face coverings in shared public spaces on campus. **If you repeatedly fail to wear a face covering in class, you may be referred to the Dean of Students for a possible violation of the Student Code.**

Some courses may require attendance due to hands-on coursework. Please read the syllabus and attendance requirements for the course thoroughly.

Some students may qualify for accommodations & exemptions from these guidelines through the Americans with Disabilities Act (ADA). Accommodations should be obtained prior to the first day of class.

If you believe you meet these criteria, contact:

Center for Disability & Access

801-581-5020

disability.utah.edu (Links to an external site.)

162 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.2. Drop/Withdrawal Policies

Students may drop a course within the first two weeks of a given semester without any penalties.

Students may officially withdraw (W) from a class or all classes after the drop deadline through the midpoint of a course. A "W" grade is recorded on the transcript and appropriate tuition/fees are assessed. The grade "W" is not used in calculating the student's GPA.

For deadlines to withdraw from full-term, first, and second session classes, see the U's [Academic Calendar](#) (Links to an external site.).

5.3. Plagiarism & Cheating

See also "**3.4. Academic Misconduct and Plagiarism**" section above (Ctrl+Click to follow link).

It is assumed that all work submitted to your instructor is your own work. When you have used ideas of others, you must properly indicate that you have done so.

Plagiarism and cheating are serious offenses and may be punished by failure on an individual assignment, and/or failure in the course. Academic misconduct, according to the University of Utah Student Code,

“...Includes, but is not limited to, cheating, misrepresenting one’s work, inappropriately collaborating, plagiarism, and fabrication or falsification of information...It also includes facilitating academic misconduct by intentionally helping or attempting to help another to commit an act of academic misconduct.”

For details on plagiarism and other important course conduct issues, see the U's [Code of Student Rights and Responsibilities \(Links to an external site.\)](#).

5.4 Safety at the U

The University of Utah values the safety of all campus community members. You will receive important emergency alerts and safety messages regarding campus safety via text message.

For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu ([Links to an external site.](#)).

To report suspicious activity or to request a courtesy escort, contact:

Campus Police & Department of Public Safety

801-585-COPS (801-585-2677)

dps.utah.edu ([Links to an external site.](#))

1735 E. S. Campus Dr.

Salt Lake City, UT 84112

Additional contacts and information:

- If you are in imminent and immediate danger, dial 911
- Utah Domestic Violence Coalition: 800-897-5465

5.5. Wellness at the U

Your personal health and wellness are essential to your success as a student. Personal concerns like stress, anxiety, relationship difficulties, depression, or cross-cultural differences can interfere with a student’s ability to succeed and thrive in this course and at the University of Utah.

Please feel welcome to reach out to your instructor or TA's to handle issues regarding your coursework.

For helpful resources to manage your personal wellness and counseling options, contact:

Center for Student Wellness

801-581-7776

wellness.utah.edu

2100 Eccles Student Life Center

1836 Student Life Way

Salt Lake City, UT 84112

Women's Resource Center

801-581-8030

womenscenter.utah.edu ([Links to an external site.](#))

411 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.6. Addressing Sexual Harassment

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status, or genetic information.

If you or someone you know has been harassed or assaulted, you are encouraged to report it to university officials:

Title IX Coordinator & Office of Equal Opportunity and Affirmative Action

801-581-8365
oeo.utah.edu (Links to an external site.)
135 Park Building
201 Presidents' Cir.
Salt Lake City, UT 84112

Office of the Dean of Students

801-581-7066
deanofstudents.utah.edu (Links to an external site.)
270 Union Building
200 S. Central Campus Dr.
Salt Lake City, UT 84112
To file a police report, contact:

Campus Police & Department of Public Safety

801-585-COPS (801-585-2677)
dps.utah.edu (Links to an external site.)
1735 E. S. Campus Dr.
Salt Lake City, UT 84112

If you do not feel comfortable reporting to authorities, the U's Victim-Survivor Advocates provide **free, confidential** and **trauma-informed** support services to **students, faculty, and staff** who have experienced interpersonal violence.

To **privately** explore options and resources available to you with an advocate, contact:

Center for Student Wellness

801-581-7776
wellness.utah.edu
328 Student Services Building
201 S. 1460 E.
Salt Lake City, UT 84112

5.7. Americans with Disabilities Act (ADA)

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability & Access (CDA). CDA will work with you and the instructor to make arrangements for accommodations. Prior notice is appreciated. To read the full accommodations policy for the University of Utah, please see Section Q of the [Instruction & Evaluation regulations \(Links to an external site.\)](#).

If you will need accommodations in this class, or for more information about what support they provide, contact:

Center for Disability & Access

801-581-5020
disability.utah.edu (Links to an external site.)
162 Union Building
200 S. Central Campus Dr.
Salt Lake City, UT 84112

5.8. Diverse Student Support

Your success at the University of Utah is important to all of us here! If you feel like you need extra support in academics, overcoming personal difficulties, or finding community, the U is here for you.

5.8.1. Student Support Services (Trio)

TRIO federal programs are targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities.

Student Support Services (SSS) is a TRIO program for current or incoming undergraduate university students who are seeking their first bachelor's degree and need academic assistance and other services to be successful at the University of Utah.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

Student Support Services (TRIO)

801-581-7188

trio.utah.edu ([Links to an external site.](#))

Room 2075

1901 E. S. Campus Dr.

Salt Lake City, UT 84112

5.8.2. American Indian Students

The AIRC works to increase American Indian student visibility and success on campus by advocating for and providing student-centered programs and tools to enhance academic success, cultural events to promote personal well-being, and a supportive “home-away-from-home” space for students to grow and develop leadership skills.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

American Indian Resource Center

801-581-7019

diversity.utah.edu/centers/airc ([Links to an external site.](#))

Fort Douglas Building 622

1925 De Trobriand St.

Salt Lake City, UT 84113

5.8.3. Black Students

Using a pan-African lens, the Black Cultural Center seeks to counteract persistent campus-wide and global anti-blackness. The Black Cultural Center works to holistically enrich, educate, and advocate for students, faculty, and staff through Black centered programming, culturally affirming educational initiatives, and retention strategies.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

Black Cultural Center

801-213-1441

diversity.utah.edu/centers/bcc ([Links to an external site.](#))

Fort Douglas Building 603

95 Fort Douglas Blvd.

Salt Lake City, UT 84113

5.8.4. Students with Children

Our mission is to support and coordinate information, program development and services that enhance family resources as well as the availability, affordability and quality of child care for University students, faculty and staff.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

Center for Childcare & Family Resources

801-585-5897

childcare.utah.edu (Links to an external site.)

408 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.8.5. Students with Disabilities

The Center for Disability Services is dedicated to serving students with disabilities by providing the opportunity for success and equal access at the University of Utah. They also strive to create an inclusive, safe, and respectful environment.

For more information about what support they provide and links to other resources, view their website or contact:

Center for Disability Services

801-581-5020

disability.utah.edu (Links to an external site.)

162 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.8.6. Students of Ethnic Descent

The Center for Ethnic Student Affairs offers several programs dedicated to the success of students with varied cultural and ethnic backgrounds. Their mission is to create an inclusive, safe campus community that values the experiences of all students.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

Center for Ethnic Student Affairs

801-581-8151

diversity.utah.edu/centers/cesa/ (Links to an external site.)

235 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.8.7. English As a Second/Additional Language (ESL) Students

If you are an English language learner, there are several resources on campus available to help you develop your English writing and language skills. Feel free to contact:

Writing Center

801-587-9122

writingcenter.utah.edu (Links to an external site.)

2701 Marriott Library

295 S 1500 E

Salt Lake City, UT 84112

English for Academic Success (EAS) Program

801-581-8047

linguistics.utah.edu/eas-program (Links to an external site.)

2300 LNCO

55 S. Central Campus Dr.

Salt Lake City, UT 84112

English Language Institute

801-581-4600

continue.utah.edu/eli (Links to an external site.)

540 Arapeen Dr.

Salt Lake City, UT 84108

5.8.9. Undocumented Students

Immigration is a complex phenomenon with broad impact—those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles that prevent you from engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center.

Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. For more information about what support they provide and links to other resources, view their website or contact:

Dream Center

801-213-3697

dream.utah.edu

(Links to an external site.)

1120 Annex (Wing B)

1901 E. S. Campus Dr.

Salt Lake City, UT 84112

5.8.10. LGBTQ+ Students

The LGBTQ+ Resource Center acts in accountability with the campus community by identifying the needs of people with a queer range of [a]gender and [a]sexual experiences and responding with university-wide services.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

LGBTQ+ Resource Center

801-587-7973

lgbt.utah.edu (Links to an external site.)

409 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.8.11. Veterans & Military Students

The mission of the Veterans Support Center is to improve and enhance the individual and academic success of veterans, service members, and their family members who attend the university; to help them receive the benefits they earned; and to serve as a liaison between the student veteran community and the university.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

Veterans Support Center

801-587-7722

veteranscenter.utah.edu (Links to an external site.)

418 Union Building

200 S. Central Campus Dr.
Salt Lake City, UT 84112

5.8.12. Women

The Women's Resource Center (WRC) at the University of Utah serves as the central resource for educational and support services for women. Honoring the complexities of women's identities, the WRC facilitates choices and changes through programs, counseling, and training grounded in a commitment to advance social justice and equality.

For more information about what support they provide, a list of ongoing events, and links to other resources, view their website or contact:

Women's Resource Center

801-581-8030

womenscenter.utah.edu (Links to an external site.)

411 Union Building

200 S. Central Campus Dr.

Salt Lake City, UT 84112

5.8.13. Inclusivity at the U

The Office for Inclusive Excellence is here to engage, support, and advance an environment fostering the values of respect, diversity, equity, inclusivity, and academic excellence for students in our increasingly global campus community. They also handle reports of bias in the classroom as outlined below:

Bias or hate incidents consist of speech, conduct, or some other form of expression or action that is motivated wholly or in part by prejudice or bias whose impact discriminates, demeans, embarrasses, assigns stereotypes, harasses, or excludes individuals because of their race, color, ethnicity, national origin, language, sex, size, gender identity or expression, sexual orientation, disability, age, or religion.

For more information about what support they provide and links to other resources, or to report a bias incident, view their website or contact:

Office for Inclusive Excellence

801-581-4600

inclusive-excellence.utah.edu (Links to an external site.)

170 Annex (Wing D)

1901 E. S. Campus Dr.

Salt Lake City, UT 84112

5.8.14 Other Student Groups at the U

To learn more about some of the other resource groups available at the U, check out:

getinvolved.utah.edu/

studentsuccess.utah.edu/resources/student-support

5.9. University of Utah Addendum, 5 August 2020 (COVID-19 issues)

Note to users:

The following information, guidelines, and requirements were distributed by University administration after previous versions of this syllabus were generated. Some of information in the U Addendum had already been included in the initial version of the syllabus. The UoU addendum below has been modified as appropriate, including deletion of redundant or non-applicable information. In a few cases, corresponding modifications to the previous portions of the syllabus have also been made. Some portions may not apply (e.g., if we do not have in-person sessions).

- o **Face coverings are required in all in-person classes for both students AND faculty and TAs.**
 - On the basis of CDC guidelines, the University requires everyone to wear face coverings in shared public spaces on campus, including our classroom. As a reminder, when we instructors wear a face covering, we are protecting you. When you wear a face covering, you are protecting us and all of your classmates. If you forget your face covering, we will ask you to leave class to retrieve it. If you repeatedly fail to wear a face covering in class, we will refer you to the Dean of Students for a possible violation of the Student Code. Note that some students may qualify for accommodations through the Americans with Disabilities Act (ADA). If you think you meet these criteria and desire an exception to the face covering policy, contact the [Center for Disability and Access](#) (CDA). Accommodations should be obtained prior to the first day of class so that we are notified by CDA of any students who are not required to wear a face covering.
- o **Please note that face shields alone are not an acceptable form of face covering unless also worn with a covering or mask for the nose and mouth.**
- o **Students should practice appropriate personal hygiene to reduce transmission of the virus, including the following:**
 - Students are encouraged to wash their hands, use hand sanitizer and clean their desks with wipes, which will be available at classroom entrances and at “sanitizing stations” in multi-use buildings, including Marriott Library.
 - Read more information about the building cleaning schedule on coronavirus.utah.edu.
- o **The university is asking students, faculty and staff to stay home if they are sick.** Additionally, follow university [employee exposure guidance](#). The list of symptoms for COVID-19 is available on the [CDC website](#).
- o **Students should familiarize themselves with Canvas and any other electronic teaching tools we may use.** The [Canvas Getting Started Guide for Students](#) can be helpful.
- o **Students must self-report if they test positive for COVID-19** via this website: <https://coronavirus.utah.edu/>.
- o Please see syllabus description of exam format.
- o **All class materials can be accessed online.** The libraries will continue to underwrite student access to electronic course materials, subject to budget realities.
- o **Experiential education guidelines:**
 - If individuals will be within 6 feet of one another during a group experiential education activity, all must wear **safety glasses** in addition to a face covering and limit time that they are within 6 feet of one another.
 - Research laboratory protocols, as described by the Office of the Vice President for Research, generally apply:
 - § **Students in instructional laboratories must wear safety glasses in addition to a face covering.**
 - § Students should sanitize laboratory workstations before beginning work.
 - § Movement in and out of labs and studios to obtain materials or equipment should be minimized during the activity. Ideally, all needed materials will be available in the room at the beginning of the period.
 - § Gloves and sanitizers will be provided in every laboratory.
 - § Disposable face coverings will be available if the laboratory involves use of hazardous material.
 - § If a student or instructor tests positive for COVID-19, the experiential education space will be sanitized by facilities and the unit should sanitize any associated equipment.

6. ASUU RESOLUTION

On Nov. 30, 2020, the University of Utah's Academic Senate unanimously endorsed an [ASUU resolution](#) on student well-being during COVID-19, as described here: [Students' well-being in a pandemic | @theU \(utah.edu\)](#).

This course will be conducted in keeping with several though not all of the actions suggested in the resolution. Multiple specifics are indicated throughout the syllabus.

Here, I further explicitly indicate that I would be happy to discuss verbally with students several issues outlined in the resolution's suggested actions, as the resolution requests.

I encourage students' web camera use during IVC sessions, and I expect camera use especially for the student-led discussions. Your fellow students (and I) respond to you as a human being. You too are more likely to remain actively engaged when your camera is on.

Most lectures and potentially also discussions may be Zoom recorded and posted. Most students have strongly preferred this option in our last two semesters of COVID-19. Some other activities may be recorded or not, at students' discretion.

There can also be valid reasons that this (or another) generally desirable option may not work for a particular student, or at a particular time. Please reach out to me (GAC) confidentially if you desire different arrangements. It may even be possible to provide an alias for you if appropriate. I have not had any previous student requests to translate this idea into practice, but am receptive to trying.

Mental health ultimately is physical health. That's a basic truism of this course. The brain controls cognition and affect. Rocks don't think. Rocks don't emote. People do. Conventional physical illnesses or traumas provide valid reasons for accommodations. Mental issues can be valid reasons, too. If severe, both types of health concerns often warrant treatments by professional health care workers.

7. SYLLABUS VERSION HISTORY

- v210107-0918-gac
Initial posting.