PSY201H1F: Statistics I
Fall 2023 LEC0201

Instructor Info

Instructor: Dr. Patricia Y. Sanchez (she/her)
Email: patricia.sanchez@utoronto.ca

Office Info: Room 4051 in Sid Smith

Zoom Room Info:
Meeting ID: 797 294 4734
Passcode: 102046

Office Hours:
By appointment (email me)

Teaching Assistant Team Info

Last names: A – Gal	Last names: Gao – Ma
TA: Lauren Homann (she/her) **Email:** lauren.homann@mail.utoronto.ca **Office Hours:** Tuesdays, 9-10am	**TA:** Gaqi Tu (she/her) **Email:** gaqi.tu@mail.utoronto.ca **Office Hours:** Thursdays, 8-9pm
Last names: Mc – Tam	Last names: Tan – Z
TA: Liliana Wu (she/her) **Email:** liliana.wu@mail.utoronto.ca **Office Hours:** Tuesdays, 1-2pm	**TA:** Jessica Zaffino (she/her) **Email:** jessica.zaffino@mail.utoronto.ca **Office Hours:** Tuesdays, 10-11am

Course Info

Classes Meet: Tuesdays, 3-5pm Thursdays, 3-4pm	Room: MB 128 (Mining Building)

Course Website:
https://q.utoronto.ca/courses/311829

Reading(s):
Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the Behavioral Sciences* (10th Ed.). Boston, MA: Cengage Learning. ISBN: 978-1-337-36622-9 (required)

MindTap® Psychology, ISBN: 978-1-337-28075-4 (required) * URL and Course Key to be Posted on Quercus

Note about the text: I encourage you to shop around for the best price, but a special UofT price is available at our bookstore – MindTap® alone (which includes an ebook version of our text) can be purchased for $64.95, and MindTap® bundled with a paperback version of the text can be purchased for $139.95. In addition, purchasing MindTap® through the bookstore will come with 12 months of access (compared to the typical 6 months, and for less money!), something to consider if you will be taking PSY202 this coming Winter or Summer term. Purchase MindTap® access from the bookstore here.

If the cost of this platform is prohibitive and will prevent you from participating in this class, please email Dr. Sanchez to help with a plan.

Course Overview & Goals

The overall goal of this course is to help you become a good statistical citizen and improve your statistical thinking (also called statistical literacy). Specifically, we will cover foundational topics in statistics that are important for

conducting and understanding psychological research such as probability, distributions, variables, and hypothesis testing.

Intended Learning Outcomes
By the end of this course you should be able to:
1. Interpret basic statistical results (e.g., basic measures of central tendency and variability, distinguishing correlation from causation, interpreting tables and figures)
2. Apply appropriate statistical strategies to test hypotheses (e.g., selecting appropriate statistical test and data analysis plan for a given research question)
3. Apply appropriate statistical and research strategies to collect, analyze, and interpret data, and report research findings (e.g., correctly analyzing and interpreting data, identifying and operationalizing variables, produce and interpret reports of statistical analyses in APA style)
4. Critically evaluate statistical information and make appropriate conclusions (e.g., calculating and interpreting the meaning of tests of statistical significance, confidence intervals, effect size estimates, distinguishing practical from statistical significance)
5. Evaluate the public presentation of statistics (e.g., recognizing when statistics are presented in an inaccurate or misleading way, assessing the validity of claims made in popular research reporting)

Prerequisites: PSY100H1/ PSY100Y5/ (PSYA01H3, PSYA02H3)/ COG250Y1
Exclusions: ECO220Y1/ EEB225H1/ GGR270H1/ IRW220H1/ POL222H1/ SOC202H1/ STA220H1/ STA238H1/ STA248H1/ STA288H1/ PSY201H5/ STA215H5/ STA220H5/ PSYB07H3/ STAB22H3/ STAB23H3/ STAB57H3
It is your responsibility to ensure that you have met all prerequisites listed in the Psychology section of the A&S Calendar for this course. If you lack any prerequisites, you will be removed. No waivers will be granted.

Course Structure & Requirements

Course Communication
- *General inquiries related to course content, policies, or assessments* should first be posted to the relevant Quercus Discussion Board. The TAs and Dr. Sanchez will monitor the board, but you are welcome to respond to and support your peers as well.

- *Scheduling appointments to _review content, get study advice, or view tests_ should be done by emailing your TA directly (see *Teaching Assistant Team Info* above)*
- *Personal questions related to _illness, accessibility, accommodations, or other class concerns_ should be addressed directly to the instructor, Dr. Sanchez at patricia.sanchez@utoronto.ca*
- *_FOR ALL EMAILS_: Please include a descriptive subject line, a greeting, complete sentences, and a signature with your full name. Please also include "PSY201 LEC0201" in the subject line with the topic of your email! Make sure though that your subject is still descriptive (i.e., "PSY201 LEC0201 lecture question" is not descriptive enough). See *Online Communication Policy* below for more info.*

Course Webpage: Quercus
This course will use the University's learning management system, Quercus, to post course information regarding assignments, grades, readings, and important announcements. You will also be submitting assignments and participating in online assessments on the MindTap® platform (see more in *Problem Sets* below). I will heavily rely on both Quercus and MindTap® throughout the semester so make sure you develop a plan to check these platforms regularly.

Lectures
In our class meetings, we will discuss important concepts of the course as well as engage in activities and explore real-world applications of these concepts. Lectures will review and synthesize material from the readings and introduce additional material to help expand on important points or ideas. Lecture slides will be provided in PDF format before each class period. These slides are meant to support your learning and do not contain the level of detail that is required to do well in this class. Thus, keep in mind reading the slides is not a substitute for attending class. If you miss a class, you are responsible for borrowing notes from a classmate or scheduling office hours to review missed material. Note: the instructor and TAs will *review* missed material with you, not *re-teach* the lesson. (See *Missed Term Work policy* below).

Lectures will be recorded, and available upon request. You may not independently record any part of the lectures unless you receive explicit permission from the instructor. If you are given permission to record any part of a lecture, the recordings cannot be distributed to anyone (including other students in the course) or posted online. Remember that the recording is only for the use of studying for the course (see *Use of Course Material* policy below).

Engagement and Participation
Your active engagement with the course material by participating in discussions and activities, taking notes, and thinking deeply about the questions that are posed helps us build a positive learning environment and enhances your understanding of the course concepts. There will also be several opportunities to participate outside the classroom such as discussion boards and journals. Your participation and engagement will be evaluated for effort (i.e., reading material before class, contributing to discussions, thinking deeply about the material) and quality (i.e., insightfulness, respectfulness).

Although attendance does not directly contribute to your grade, you will miss out on important class discussions and activities if you do not attend regularly. Please let me know if you will be unable to participate in class for any reason.

Preparation (Readings)
You will be required to keep up with assigned reading material regularly throughout the semester. The textbook is a supplement to our lectures, and vice versa. Meaning, sometimes the textbook will cover a concept that we don't discuss in detail in class. You are responsible for the material in all assigned chapters for tests, whether it is explicitly covered in lecture or not. The textbook will be particularly helpful for reviewing and practicing outside of class.

Independent Practice with MindTap®
Regular practice is critical to your success in this class. Lectures will provide some opportunities to apply course concepts, but it is key for long-term retention and learning to frequently practice applying course concepts. We will be using MindTap® platform for these weekly practice assignments. Previous students of PSY201 have had success with MindTap® in this course (see *MindTap Testimonials* on Quercus) so I highly recommend you become familiar with it as soon as possible. Although only the problem sets will contribute to your final grade (see *Problem Sets* below) the other activities provided to you will serve as excellent study and review material. I recommend you create a regular study plan to ensure you keep up with the assigned chapters.

Assessment & Evaluation

Term Tests (45%)

There will be 2 term tests covering information from both lecture and readings. Test 1 is worth 20% and Test 2 is worth 25%. These tests may include multiple choice, short answer, and essay/computation questions. You should be prepared to provide definitions and explanations of concepts, perform calculations, make connections across concepts, and apply the material to novel scenarios. Tests will take place in person and you will be allowed to bring one index card of notes. More info on this will be presented throughout the term.

You are expected to be present for the tests and the tests must be taken as scheduled. Please be advised not to make work, holiday, or travel arrangements that might conflict with taking these tests as scheduled. It is your responsibility to inform me if you will not be able to attend on test day (see *Missed Term Work Policy* below). Notification of medical or personal emergencies must be emailed to Dr. Sanchez within 12 hours of the test, otherwise a grade of "0" will be entered for the test.

Problem Sets (10%)

On the MindTap® platform, you will complete Problem Sets for each of the assigned chapters. Problem sets will typically be due the Monday *after* the week we cover the assigned material (see Course Schedule below). Extensions will not be granted on these problem sets unless there is a system-wide error so make sure you plan accordingly (see *Late Assignments & Extensions* policy below). I will drop the lowest 3 of your problem sets at the end of the term.

Science Communication Assignment (10%)

In order to apply what you learn in this course to real-world scenarios, you will engage in small group discussion assignments on the Discussion Board on Quercus. You will be given readings and/or videos on a chosen topic, and then engage in a guided discussion with your group. More details on this assignment will be covered later in the semester.

Journals (5%)

Throughout the semester, you will write journal entries where you reflect on your own learning experience in the course. Reflecting on your own thinking and learning can help you become a better learner (and not just for stats!). In addition to reflection, you can use these journals to monitor your own progress, problem-solve, and track your learning goals. To earn full marks, you must complete at least 5 entries by the last day of classes (by 11:59pm on December 6). Because these journals are meant to help you *along the learning*

process, entries must be at least one week apart from one another to count toward your final grade. In other words, if you submit 5 entries on the last week of class, only one will count toward your final grade. More details on these journals will be provided on Quercus.

Final Exam (30%)
The final exam will be cumulative and cover topics from the entire semester. Like the term tests, the final exam may contain multiple choice, short answer, and essay/computation questions. The exam will be held during the final examination period and must be taken as scheduled.

Grading/Marking Scheme

Your final grade in this course will be calculated based on the breakdown below:

	Weight (%)
Term Test 1	20%
Term Test 2	25%
Problem Sets	10%
Science Communication Assignment	10%
Journals	5%
Final Exam	30%

Note: Any grades posted in the Quercus gradebook are posted for your information only, so you can view and track your progress through the course. No grades are considered official, included any posted in Quercus at any point in the term, until they have been formally approved by me at the end of the course.

Course Policies

Late Assignments & Extensions
Problem sets will incur a 5% penalty for each day it is late up to 25% (5 days after the due date). Late problem sets will *not be accepted more than 5 days after the due date* unless you have formal accommodations, have provided legitimate documentation, or prior arrangements have been made. Extensions will **not be granted** on problem sets without appropriate documentation. Please

do not email me asking for extensions on problem sets unless you are presenting and submitting formal documentation. I will drop the lowest three of your problem sets at the end of the term.

Extensions on other assignments (e.g., journals and the science communication assignment) will only be granted in the case of registered accommodations or extraordinary circumstances and may involve point deductions. Please let Dr. Sanchez know about extraordinary circumstances by email within 12 hours of the missed deadline (or as soon as you can), and we can discuss your case.

Missed Term Work Policy

If you miss class for *any* reason, you are responsible for making up the missed material and you should not expect the instructor or TA to re-teach the material. If you miss a test, you must submit documentation to Dr. Sanchez that demonstrates your inability to be present for the test (i.e., the ACORN illness self-declaration tool, UofT Verification of Illness or Injury form (VOI), a letter from your College Registrar or Accessibility Counselor). Documentation must be submitted within 7 calendar days of the missed test. If you do not provide appropriate documentation, you will receive a 0 for the missed test.

Make up tests will not be issued. If you are legitimately excused from missing a term test, your other term test and the final exam will be reweighted to make up for the missing assessment (the remaining term test will be weighted 30% and the final exam at 45%). If you miss both term tests, your final assessment will be reweighted to 60%, with an additional 5% allocated to each of your MindTap®, Journal, and Science Communication assignment grades. If you miss the final exam, you will need to contact your College Registrar to file a petition for late term work (https://www.artsci.utoronto.ca/current/faculty-registrar/petitions) or work out an alternative plan.

University's Plagiarism Detection Tool

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation website (https://uoft.me/pdt-faq).

Online Communication Policy

Some questions are best answered in person or in an online meeting and some are best answered via email. If you have a complex question (i.e., you want to further discuss an idea from the course), me or your TA will be happy to meet with you to discuss it (see *Course Communication* above). Having face-to-face discussions, whether in person or online, about complex questions or issues is generally more effective. If you have a short/simple question, email might be the most efficient way to ask it. If you don't know, send an email with your question to either me or the TA and we'll let you know if a meeting would be better.

When communicating via email please adhere to the following:
- o Students can expect an email response within 48 hours not including weekends. Emails received after 6pm will count as being received the following business day. Do not email the day of the due date with a question about the assignment, we might not see your email in time to send a helpful reply.
- o Please consult the course syllabus, schedule, other handouts, and announcements on Quercus *before* submitting inquires by email. There's a chance there is an answer to your question somewhere in these materials.
- o In the subject line indicate the course code and the topic of your email (e.g., PSY201 LEC0201 Ch. 3 Problem Set question).
- o Begin your emails by greeting the person you are writing to (e.g., "Hello Professor Sanchez", "Dear Prof. Sanchez,"). Make sure to address the person who you are emailing in your greeting.
- o Emails should come from your utoronto email account to communicate with the professor and TA (otherwise they may get marked as spam).
- o All communications (verbal, email) should be respectful in language and tone and constructive in nature. This includes communications with me, the TA, and your fellow students.

Grade Dispute Policy
If you believe an assignment has been incorrectly or unfairly marked, you can request a re-evaluation from the grader. You must wait 24 hours after the feedback is returned to bring up a grade concern. Grade concerns received within 24 hours of receiving the feedback will not be considered. Additionally, grade concerns must be brought to either mine or your TA's attention within 14 days of the return of the assignment. Requests received after this time will not be considered.

If you have concerns about how an assignment or test was graded, please first meet with your TA who graded your work. If, after your meeting, you still would like to submit your work for re-evaluation, please submit the request to Dr. Sanchez. In your request, please email me with a short paragraph detailing your grade concern including: 1) the question(s) to be re-evaluated, 2) why you provided the answer you did and where in the course materials you learned this content, and 3) why you think the grade is incorrect or incomplete and what in the course materials would support your request. Only reasonable and well-justified concerns will be considered, and all decisions are final.

Please consider very carefully before contesting your grade for an assignment or test. Course instructors and TAs work very hard to mark course assignments and tests as fairly as possible. By submitting a grade dispute, you are consenting to a full re-evaluation of the assignment. This means your grade may go up, go down, or stay the same. If a re-evaluation is granted, **you must accept the resulting mark as the new mark.**

Specific Medical Circumstances

If you become ill and it affects your ability to do your academic work, consult me right away. Normally, I will ask you for documentation in support of your specific medical circumstances. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. You can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI. For more information on the VOI, please see www.illnessverification.utoronto.ca. For information on Absence Declaration Tool for A&S students, please see www.artsci.utoronto.ca/absence. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

Religious Accommodation

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. I will make every reasonable effort to avoid scheduling assessments or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (such as a test) due to a religious observance, please let me

know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

Accommodation for Personal Reasons
There may be times when you are unable to complete course work on time due to non-medical or non-religious reasons. If you have concerns about your ability to complete an assignment, please speak to me or to an advisor in your College Registrar's office; they can help you to decide if you want to request an extension or accommodation. They may be able to provide you with a College Registrar's letter of support to give to your instructors, and importantly, connect you with other resources on campus for help with your situation.

Academic Integrity
All students, faculty, and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty with writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program—is a serious offence that can result in sanctions. Speak to me or your TA for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at http://www.writing.utoronto.ca. Consult the Code of Behaviour on Academic Maters for a complete outline of the University's policy and expectations. For more information, please see https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity and http://academicintegrity.utoronto.ca.

Use of Generative AI Tools
The use of generative artificial intelligence tools or apps for assignments in this course, including tools like ChatGPT and other AI writing or coding assistants, is strictly prohibited in all course assignments. Students may not copy or paraphrase from any generative AI applications for the purpose of completing assignments in this course. Representing as one's own an idea, or expression of an idea, that was AI-generated may be considered an academic offense in this course. This course policy is designed to promote your learning and intellectual development and to help you reach course learning outcomes.

Use of Course Material

Keep in mind that lectures and lecture materials are the intellectual property of the instructor, and the slides and related materials should be respected thus. Students are free to use all lecture slides and lecture material for their own use, but are not permitted to share lecture slides or materials with others not enrolled in this course without my approval. Uploading course materials to the Internet or shared server is expressly prohibited. I do not want to discover that a student has put any of my materials into the public domain, has sold my materials, or has given my materials to a person or company that is using them to earn money. The University will support me in asserting and pursuing my rights, and my copyrights, in such matters.

Note on Class Sections
There are two sections of this course this semester and I am only teaching one of them. The expectation is that you will attend and engage with the course for which you are registered. I do not advise that you register for this course with the advance knowledge that you will not be able to attend both weekly class meetings, but this is ultimately your choice to make - I also will not prohibit it. If you are concerned with your ability to engage in the course this term, please note that PSY201 is also offered in Winter and Summer, and PSY201 exclusions in other departments are also available year round.

Instructor Policy Statement
I intend to treat you with respect, to have empathy for your struggles (in and outside of this course), to assess your progress in a reasonable and thoughtful manner, and to offer you constructive feedback. I am available to discuss any concerns you have. I strongly encourage you to ask questions in class, book a visit with me or your TA during office hours, and/or email me to discuss any concerns or questions. With all issues, I encourage you to contact me as early as possible so we can work together on a solution. You may email me at any time, and I will do my best to respond within 2 business days. However, emails received on the weekends or holidays may need extra time. I will also do my best to refrain from sending out course announcements or emails on the weekends or on holidays.

Student Resources and Support

Accessibility Services (AS)
Students with diverse learning styles and needs are welcome in this course. If you have an ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year

by visiting http://www.studentlife.utoronto.ca/as/new-registration. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will then assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your condition with any instructor, and your instructors will not reveal that you are registered with AS.

Recognized Study Groups

I encourage everyone to strongly consider joining or leading a study group. The Faculty of Arts and Science has a Recognized Study Groups program that can help you facilitate this (particularly useful if you don't know anyone else in the class!). If you become a study group leader, you can also receive co-curricular credit. To learn more about the program and join or start a study group visit: https://sidneysmithcommons.artsci.utoronto.ca/recognized-study-groups/

Equity, Diversity, and Inclusion

The University of Toronto is committed to equity, human rights, and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engaged with each other, and respect one another's differences. Cultivating such an environment is important in all courses, and especially so when discussing topics like intergroup relations, stigma, and discrimination. As your instructor, I aim to create a classroom environment that supports the learning and growth of all students. Neither I nor the University of Toronto condones discrimination or harassment against any persons or communities.

Mental Health & Well-Being

As a student, you may experience challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation, financial concerns, family worries, and so forth. These factors may affect your academic performance and/or reduce your ability to participate fully in daily activities.

There are many helpful resources available through Student Life (www.studentlife.utoronto.ca and www.studentlife.utoronto.ca/feeling-distressed) and Counselling and Psychological Services (http://www.caps.utoronto.ca/main.htm). An important part of the University experience is learning how and when to ask for help. There are many resources

available to you here at the University so please take the time to inform yourself of them. Feel free to visit the Academic Success Centre (https://www.studentlife.utoronto.ca/asc/about-us) for more information on navigating through the university experience.

Writing

As a student here at the University of Toronto, you are expected to write well. The university provides its students with several resources to help them achieve this. For more information on campus writing centres and writing courses, please visit http://www.writing.utoronto.ca/.

English Language Resources

For anyone who would like to advance their understanding and command of English, there are many supports available at UofT:
http://www.artsci.utoronto.ca/current/advising/ell/resources-for-students

Course Schedule

Note: This schedule is subject to change and adjustments. Students will be advised of all updates promptly on Quercus. The topics below are guidelines of what will be covered over the course of the term.

Week	Class Date	Topic	Reading	Assignments
0	Thurs, Sept 7	Introduction to course		Sign up for MindTap®
FOUNDATIONS AND DESCRIPTIVE STATISTICS				
1	Tues, Sept 12	Variables & Measurement	Ch. 1	
	Thurs, Sept 14	The Importance of Good Data MindTap® Overview		
2	Tues, Sept 19	Frequency Distributions	Ch. 2	Ch. 1 Problem Set Due Mon, Sept 18 at 11:59pm
	Thurs, Sept 21	Spotlight on Data Visualization		
3	Tues, Sept 26	Central Tendency and Variability I	Ch. 3 Ch. 4	Ch. 2 Problem Set Due Mon, Sept 25 at 11:59pm
	Thurs, Sept 28	Central Tendency and Variability II		
4	Tues, Oct 3	Z-scores, Probability, & the Normal Curve I	Ch. 5 Ch. 6	Ch. 3/Ch. 4 Problem Sets Due Mon, Oct 2 at 11:59pm
	Thurs, Oct 4	Z-scores, Probability, & the Normal Curve II		
5	Tues, Oct 10	Sampling Distributions of Sample Means	Ch. 7	Ch. 5/Ch. 6 Problem Sets Due Tues, Oct 10 at 11:59pm
	Thurs, Oct 12	Test 1 Review		
6	Tues, Oct 17	TEST 1		Ch. 7 Problem Set Due Mon, Oct 16 at 11:59pm
	Thurs,	No Class!		You should have 2 journal

	Oct 19			entries by now
	INFERENTIAL STATISTICS			
7	Tues, Oct 24	Introduction to Hypothesis Testing I	Ch. 8	
	Thurs, Oct 26	Introduction to Hypothesis Testing II		
8	Tues, Oct 31	T-Tests I	Ch. 9	Ch. 8 Problem Set Due Mon, Oct 30 at 11:59pm
	Thurs, Nov 2	T-Tests II		
	Nov 6 – Nov 10	NO CLASSES (READING WEEK)		
9	Tues, Nov 14	T-Tests with 2 samples I	Ch. 10	Ch. 9 Problem Set Due Mon, Nov 13 at 11:59pm
	Thurs, Nov 16	Test 2 Review		
10	Tues, Nov 21	**TEST 2**		Ch. 10 Problem Set Due Mon, Nov 20 at 11:59pm
	Thurs, Nov 23	T-Tests with 2 samples II	Ch. 11	You should have 4 journal entries by now
11	Tues, Nov 28	ANOVA I	Ch. 12	Ch. 11 Problem Set Due Mon, Nov 27 at 11:59pm Science Communication Posts Due Wed, Nov 29 at 11:59pm
	Thurs, Nov 30	ANOVA II		
12	Tues, Dec 5	Correlations	Ch. 15	Ch. 12 Problem Set Due Mon, Dec 4 at 11:59pm Ch. 15 Problem Set Due Wed, Dec 6 at 11:59pm Last journal entry Due by Wed, Dec 6 at 11:59pm Science Communication Responses Due by Wed, Dec 6 at 11:59pm

CUMULATIVE FINAL EXAM

All assignments are due at 11:59pm EST on their scheduled due date unless otherwise stated.