

Division of Social and Behavioral Sciences Psychology Department

http://www.hccs.edu/programs/areas-of-study/social--behavioral-sciences/psychology/

PSYC 2317 Statistical Methods in Psychology | Lecture | 12430

Spring 2019 | 16 Weeks (1.14.2019-5.12.2019)

In-Person | Northline Room 206| Sat. 8:00AM - 10:50AM 3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Saira Rab, Ph.D. Office Phone: NA

Office: Room 310 Office Hours: Saturdays by appt.

HCC Email: Saira.rab@hccs.edu Office Location: Northline Campus room 310

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear your concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

I will respond quickly via email – within 24 hours every day. Please be sure to give enough time for deadline related responses. I will respond via HCC email, so please use that one.

What's Exciting About This Course

Have you ever heard someone claim that statistics can be manipulated to say whatever the person manipulating them wants them to say? You're about to find out if that's true. This course will arm you with the knowledge you need to evaluate the statistical information you hear in the media, not to mention statistical statements that pop up in every psychology class you take. For instance, what are psychologists who say "there was a statistically significant difference between the experimental and control groups" trying to tell you? By the time you finish this course, you'll not only know, but you'll also be able to explain it to others. You'll also learn how researchers decide which type of statistical analysis is best for answering a specific question about a mental process or behavior. You'll gain confidence, too, as you learn to use statistics to analyze data totally on your own—no computers needed. Yes, math is involved. No worries—if you use the resources and path to success that this course includes, you'll be successful!

My Personal Welcome

Welcome to Introduction to Statistics—I'm delighted that you have chosen this course. One of my passions is to know as much as I can about human behavior, and I can hardly wait to pass that on. I am an adjunct professor at HCC with a Ph.D. in Educational Psychology and Individual Differences from the University of Houston. My goal is to become a tenured professor, and in doing so, I have decided to create the atmosphere of a student-learner centered course. You will be learning statistical methods in psychological context, so please utilize our classroom space as a learning experience.

I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life. As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available during posted office hours to tackle any questions you might have. My goal is for you to walk out of the course with a better understanding of yourself and of statistical procedures. So please visit me or contact me whenever you have a question.

Prerequisites and/or Co-Requisites

PSYC 2317 requires MATH 0312 (or higher). Students must be placed into college-level reading (or take INRW 0420 or ESOL 0360 as a co-requisite and be placed into MATH 0312 or higher. If you have enrolled in this course without having satisfied these prerequisites, you are at higher risk of failure or withdrawal than students who have done so, and you should carefully read and consider the repeater policy in the
HCC Student Handbook.">HCC Student Handbook.

Eagle Online Canvas Learning Management System

This course will use <u>Eagle Online Canvas</u> (https://eagleonline.hccs.edu) to supplement inclass assignments, exams, and activities. I will be using Eagle Online Canvas for all course PowerPoint slides, assignments, grading, and for the written portion of class. Please check canvas at least twice a week to keep up with due dates and announcements.

HCCS Open Lab locations may be used to access the Internet and Eagle Online Canvas. It is recommended that you **USE FIREFOX OR CHROME AS YOUR BROWSER**.

HCC Online Information and Policies

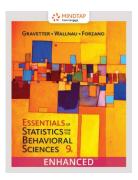
Although this is an in-person class, I encourage you to visit the HCC Online information pages. They contain a great deal of useful information about using Canvas. Here is the link to HCC Online: http://www.hccs.edu/online/.

Scoring Rubrics, Assignment Instructions, etc.

Look in Eagle Online Canvas for the scoring rubrics for assignments, assignment instructions, exam instructions, and other information to assist you in the course. https://eagleonline.hccs.edu/login/ldap

Instructional Materials

Textbook Information



This textbook is **required** for this class: Gravetter & Wallnau. (2018). *Essentials of Statistics for the Behavioral Sciences* (9th Edition). ISBN: 9781337593908.

It is included in a package that contains the text as well as an access code that may be purchased at the <u>HCC Bookstore</u>. The access code is **required** unless you plan to purchase access to MindTap directly from the publisher. Order your book here: <u>HCC Bookstore</u>

Temporary Free Access to E-Book

Here is the link to get temporary free access to a digital version of the text for a limited period of time: MindTap. Best way to access our course review exams on Mindtap is to go to eagleonline.hccs.edu and click the assignments through there. You can also login through eagle online canvas to access your eBook and check Mindtap grades.

Other Instructional Resources

MindTap

<u>MindTap</u> is a premium website that includes an e-book, a printable version of the textbook, as well as practice quizzes, videos, and other useful study tools. It is required in this class. You can purchase it using an access code packaged with a new copy of the textbook or directly from the publisher. You will be completing graded work in <u>MindTap</u> as described in the "Other Assignments and Activities" section that you'll see later in the syllabus.

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the HCC Tutoring Services website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at http://library.hccs.edu.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at http://www.hccs.edu/resources-for/current-students/supplemental-instruction/.

Course Overview

PSYC 2317 is an introduction to the use of scientific methods in psychology and to the statistical analysis of data. Attention is given to descriptive and inferential statistical methodology including t-tests, analysis of variance, correlation and regression.

Core Curriculum Objectives (CCOs)

PSYC 2317 satisfies the mathematics requirement in the HCCS core curriculum. The HCCS Psychology Program Committee has specified that the course addresses the core objectives as follows:

- **Critical Thinking**: Students will demonstrate the ability to engage in inquiry and analysis, evaluation and synthesis of information, and creative thinking by completing a written assignment such as a book report, research paper, or essay.
- **Communication Skills**: Students will demonstrate effective development, interpretation and expression of ideas through written, oral, and visual communication by completing a written assignment such as a book report, research paper, or essay.
- Quantitative and Empirical Literacy: Students will demonstrate the ability to draw
 conclusions based on the systematic analysis of topics using observation, experiment,
 and/or numerical skills by completing textbook reading assignments, completing
 assignments, and answering questions on quizzes and exams.
- Social Responsibility: Students will demonstrate cultural self-awareness, intercultural competency, civil knowledge, and the ability to engage effectively in regional, national, and global communities by completing textbook reading assignments, completing assignments, and answering questions on quizzes and exams.

Program Student Learning Outcomes (PSLOs)

Can be found at:

http://www.hccs.edu/programs/areas-of-study/social--behavioral-sciences/psychology/

Course Student Learning Outcomes (CSLOs)

Upon completion of PSYC 2317, the student will be able to:

- Identify and interpret common statistical notation, the outcomes of inferential tests and the concept of statistical significance.
- Select, explain and utilize common research designs including experimental methods, quasi-experimental methods and correlational techniques.
- Demonstrate understanding of the concepts of probability using the statistical tables.
- Calculate basic inferential statistics, including z-tests, t-tests, ANOVA, correlation coefficients, and simple linear regression.
- Use the appropriate t-test for a data set, including knowledge of single sample and independent samples t-tests.
- Conduct hypothesis tests with ANOVA (Independent Measures and Two-Factor).

Learning Objectives

Learning Objectives for each CSLO can be found at <u>Learning Objectives for PSYC 2317</u>

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as your guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and make up
- Provide the course outline and class calendar which will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook

Assignments, Exams, and Activities

Please carefully review all of the information in this section and don't hesitate to ask questions if anything is unclear to you. Be assured that I have thoughtfully designed all of the assignments, exams, and activities in this course to enable you to learn the material and to be successful. By providing due dates, I am helping you stay on track and accomplish your goal of getting the best grade you can in this course.

Written Assignment(s)

For this written assignment, you must pick one chapter from our course textbook. Read the analysis and steps, then summarize what you read. Also, you must find one research article that uses the same analysis and steps that you described in their study. Compare your

thoughts with the research article's results and contrast it with your views on your chosen chapter. This is worth 200 points or 20% of your final total grade. Further instructions are provided on eagle online canvas. You must have a total of 2-pages with double-spacing and 1" margins. No late submission can be accepted.

Exams

There is one online midterm exam, you will not need a scantron for this exam as it is online. There are 50 multiple-choice questions worth 2 points each. The purpose of this online midterm is to make sure you are reading and completing all MindTap review exams along the way. No Makeup or late exams are allowed for this course. You will have roughly two and a half hours to complete the midterm [duration of class time] and it will be available on Eagle Online Canvas on the day of your scheduled midterm. This is worth 100 points or 10% of your final total grade.

In-Class Activities

There will be at least 11 sign-in sheets and this is required attendance proof. Please sign in at the start of class and do not forget to sign in as you will be counted as absent. The sign in sheets will prove that you were in class to complete the activities and are worth 20 points each. I will allow for one missed attendance, therefore, the total points possible is 220 for this sign-in sheet and is worth 22% of your final grade.

MindTap Assignments and Activities

There are eleven in total for the chapter review exams for each week, resulting in 11 review exams via MindTap with 20 questions per chapter and is worth 20 points each (11 @ 20 pts. = 220). Keep in mind that you should stick to the due dates as MindTap assignments are lengthy and cannot be completed at the last minute. There is no time-limit on these MindTap review exams, but they cannot be turned in late. These MindTap Assignments are worth 22% of your final grade and is very important to complete, these assignments are geared to help you study for the midterm and final exams.

Other Assignments and Activities

Alongside the Mindtap assignments, you will have a practice assignment available via Canvas. You get 60 points for completing 20 questions, they will cover Ch. 1-8 and these questions will help you study for the midterm. Keep in mind that, I cannot accept any late work for this assignment. There is also an Extra credit evaluation that will open later in the semester and this will allow you to gain 20 points for completing the survey. You must show proof of completion to receive the extra credit.

Comprehensive Final Exam

There will be a comprehensive final exam in this course. The final exam is scheduled on final exam day during class-time (Saturday, May 11 for our course from 8 – 11:00 am) and there are 50 multiple choice questions that will be uploaded on Eagle Online Canvas. Each Question is worth 4 points, and you will submit your responses before the due date and time. Total

points for final exam is 200 and you cannot take it earlier than the HCC final exam scheduled date. The final is 20% of your final grade and it is cumulative.

Students who are absent from the final exam must discuss their absence with the instructor in advance or within 24 hours afterward. Students who are absent from the final exam must discuss their absence with the instructor in advance or within 24 hours afterward. Incompletes ('I') will NOT be given to students who do not communicate with me about missing the final exam.

Grading Formula

I adopted a points-based grading system with a maximum 1,000 total points possible. Calculate your final grade by dividing your total points by 1,000. Any extra credit will be added to grade total.

Written Assignment(s)	200
Exams	100
In-Class Activities	220
MindTap Assignments and Activities	220
Other Assignments and Activities	60
Comprehensive Final Exam	200
Total	1000
Maximum Extra Credit	20

Grade	Total Points
A	900+
В	800-899
С	700-799
D	600-699
F	<600

Incomplete Policy

In order to receive a grade of Incomplete ("I"), a student must have completed at least 85% of the work in the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

HCC Grading Scale can be found on this site under Academic Information: http://www.hccs.edu/resources-for/current-students/student-handbook/

Course Calendar

Spring Regular Term				
Week	Dates	Topic/What's due		
	1/19	Syllabus - Introduction to Mindtap & Course Assignments		
1		Ch. 1 lecture + Read textbook - gain access** to book with access		
		code.		

^{**}MindTap Trial ends during the second week of classes, please obtain access before it ends!

2	1/26	Ch. 2 Frequency Distributions lecture OE Day Jan. 28
	2/2	Ch 3 - Central Tendency lecture
3	,	Review: Chapters 1-3 Mindtap Exams due Feb. 2 nd before 11
		pm. No late submissions accepted.
4	2/9	Ch 4 – Variability lecture
5	2/16	Ch 5 Z-Scores lecture
6	2/23	Ch 6 Probability lecture
	3/2	Ch. 7 Sampling Distributions lecture
7	Review: Chapters 4-6 Mindtap Exams due March 2 nd befo	
		pm. No late submissions accepted.
8	3/9	Ch 8 Hypothesis Testing
	3-11-3/17	Spring Break - No class on 3/16
	3/23	Ch. 9 Intro to T-Statistics lecture
9		Deadline to Withdraw "W" grade on 3/23
,		Review: Chapters 7-8 Mindtap Exams due March 23 before 11
		pm. No late submissions accepted.
	3/30	Midterm on Eagle Online Canvas (no class).
10		Practice Midterm Questions on Canvas due 3/29 before
		Midterm completion!
11	4/6	Ch. 10 T-Statistics lecture
12	4/13	Ch. 10 T-Statistics lecture con't
13	4/20	No class (Spring Day)
	4/27	Ch(s) 12 ANOVA lecture
14		Review: Chapters 9-10 Mindtap Exams due Apr. 27 before 11
		pm. No late submissions accepted.
	5/4	Ch(s) 12 ANOVA lecture con't (last day of class)
15		Review: Chapters 12 Mindtap Exams due May 4 before 11 pm.
		No late submissions accepted.
		Written Assignment due May. 4th before midnight via Canvas
16	5/11	Final Exam is online (check Eagle Online Canvas), due before
		11 am on 5/11!

Syllabus and Calendar Modifications

The instructor reserves the right to modify the syllabus and/or course calendar at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Instructor's Practices and Procedures

Missed Assignments

I allow one missed lecture as part of life experiences, I understand that sometimes we get busy. However, no late MindTap review exams will be accepted. All MindTap assignments are open since day 1 so there is no excuse. Failure to show up for the online Midterm will require documentation and approval from instructor for makeup.

Academic Integrity

Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/ or disciplinary proceedings may be initiated by college district officials against a student accused of scholastic dishonesty. "Scholastic Dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion. Any instance of scholastic dishonesty may be reported to the Maxiant system. Possible punishments for scholastic dishonesty include a grade of "0" or "F" on the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the college district. A recommendation for suspension or expulsion will be referred to the college Dean of Students for disciplinary disposition. Students have the right to appeal the decision.

Any plagiarism or suspected cheating will result in an F on the assignment or exam.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance): http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/

Attendance Policy

Students are required to sign in at the beginning of each class. If a student fails to show to class for more than 4 weeks, without notifying the instructor, then they will be dropped from the course.

Student Conduct

Please treat other students with respect, we will discuss a wide array of topics and it is recommended that what is said in the classroom, stays in the classroom. Please do not disrupt other students, and if you need to text or talk, you can leave the classroom and return.

Instructor's Course-Specific Information

All PowerPoint slides are uploaded on our course's canvas shell under files. Please bring the slides with you to class. All quizzes will display your grades and correct answers after the due date, so you may see what you got right or wrong. All paper assignments will be graded within one week. I recommend checking Eagle online Canvas every week and at least before class. Please address the instructor as Dr. Rab

Electronic Devices

You may use technology for educational purposes (e.g., laptops for notetaking). All students are not allowed to take phone calls during class, students' cell phones must be set to silent mode, and please do not take pictures or record material from our course lectures.

Psychology Program Information

Majoring in Psychology

Visit the <u>Psychology Program Pages</u> on the Learning Web for information about our faculty and courses. You will also find information about majoring in psychology.

Student Organizations

Psi Kappa

All students are invited to join Psi Kappa, an organization that can help students learn about psychology outside the classroom, serve the community, meet students in other PSYC classes, interact with PSYC faculty, and learn leadership skills. For more information, visit the Psi Kappa page on the HCC Learning Web, the Psi Kappa Facebook page.

Psi Beta

HCC has an active chapter of Psi Beta: National Honor Society in Psychology for Community and Junior Colleges. To learn more about this organization visit the Psi Beta website. For information about the HCC chapter, visit the Psi Beta page on the HCC Learning Web.

HCC Foundation: Psychology Achievers Scholarship

To be eligible for the \$125 per semester Psychology Achievers Scholarship, a student must (1) meet all HCC Foundation criteria for scholarship eligibility, and (2) make an A in either PSYC 2301 or PSYC 2314.

HCC Policies

Here's the link to the HCC Student Handbook http://www.hccs.edu/resources-for/current-students/student-handbook/ In it you will find information about the following:

Academic Information	Incomplete Grades	
Academic Support	International Student Services	
Attendance, Repeating Courses, and Withdrawal	Health Awareness	
Career Planning and Job Search	Libraries/Bookstore	
Childcare	Police Services & Campus Safety	
disAbility Support Services	Student Life at HCC	
Electronic Devices	Student Rights and Responsibilities	
Equal Educational Opportunity	Student Services	
Financial Aid TV (FATV)	Testing	
General Student Complaints	Transfer Planning	
Grade of FX	Veteran Services	

EGLS³

The EGLS³ (Evaluation for Greater Learning Student Survey System) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS³ surveys are not offered during the Summer semester due to logistical constraints.

http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/

Campus Carry Link

Here's the link to the HCC information about Campus Carry: http://www.hccs.edu/departments/police/campus-carry/

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email

account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (http://www.hccs.edu/departments/institutional-equity/)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to http://www.hccs.edu/support-services/disability-services/

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu
http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/

Department Chair Contact Information

Dr. Karen Saenz <u>Karen.Saenz@hccs.edu</u> 713-718-7034