

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 | CRN 16938

Fall 2019 | First Eight Weeks 8.26.2019-10.20.2019)

HCC Online

3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Denise R. Boyd, Ed.D. Office Phone: 713-718-6534

Office: FFAC 130B Office Hours: F 9-2; By appointment HCC Email: denise.boyd@hccs.edu Office Location: Room 310; Fraga Campus

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

Please use Canvas email to contact me. Canvas email messages tell me which class you are enrolled in. This information is very helpful to me in determining how best to respond to your message. That's why I strongly prefer that you use Canvas email. It's for you!

I will respond to your email within 24 hours. If you prefer to leave a voicemail, please clearly state (a) your name, (b) what class you are enrolled in, and (c) what you are calling about. I will respond to your message via Canvas email.

Canvas email is the primary way in which I communicate with students. Please check your messages frequently.

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 Statistical Methods in Psychology—I'm delighted that you have chosen this course. Psychological research is one of my passions, and I love helping students better understand the statistical tools that psychologists use to answer important questions about behavior. 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, 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 statistics. 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 is a fully online class that will use <u>Eagle Online Canvas</u> (<u>https://eagleonline.hccs.edu)</u> for all assignments, exams, and activities.

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

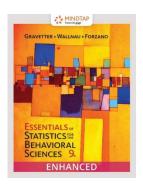
I encourage you to visit the HCC Online information pages. They contain a great deal of useful information about system requirements for using Canvas, HCC Online policies, and support services that are available for students in online classes. Here is the link to HCC Online: http://www.hccs.edu/online/.

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

Instructions for activating temporary free access to MindTap are posted in your Canvas course. Please do not register for MindTap until you can access the Canvas course.

Other Instructional Resources

MindTap

MindTap is a premium website that you will access via the "Cengage" link in your Canvas course. It 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 MindTap as described in the "MindTap 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 covers descriptive and inferential statistics used in psychological research and assessment. It includes measurement, characteristics of distributions; measures of central tendency and variability; transformed scores; correlation and regression; probability theory; and hypotheses testing and inference. (PSYC 2317 is included in the Psychology Field of Study.)

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 guizzes 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:

- Compute and interpret empirical and theoretical probabilities.
- Define and explain the characteristics of data based on their reliability, validity, and scales of measurement.
- Interpret visual representations of data, such as graphs and tables.
- Compute and interpret descriptive statistics, such as mean, median, and mode; standard deviation and range; and transformed scores.
- Compute and interpret inferential statistics and tests, such as z test, t test, ANOVA, and Chi-Square.
- Calculate, evaluate, and interpret simple linear correlation/regression.
- Construct and interpret confidence intervals.
- Examine, analyze, and compare various sampling distributions.
- Formulate, perform, and interpret hypotheses tests.

- Identify the appropriate statistical analyses for given research problems, questions, hypotheses, and data sets.
- Apply statistical knowledge to the interpretation of psychological research.
- Explain features and purpose of statistical software packages.

Learning Objectives

Learning Objectives for each CSLO can be found at Learning Objectives for PSYC 2317

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 ups
- 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 <u>HCCS Student Handbook</u>

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)

Abstract Summaries

Students will read three abstracts of psychological research articles and write a summary of each one. For detailed instructions and the grading rubric, click "Abstract Summary Instructions" in your Canvas course. Each summary will count 50 points, for a total of **150 points**.

Exams

Show Your Work Exams

There are three Show Your Work Exams required in the course. Each exam consists of a data set and 10 to 20 problems to solve or questions to answer using provided data sets. The exams are open-book and have no time limits. There are two parts to each exam: (a) answer the exam questions, (b) upload copies of your work. All work must be handwritten and show all the steps involved in each calculation. No print-outs or spreadsheets are allowed. If you do not submit your work, your exam grade will be zero. Each exam counts 100 points, for a total of **300 points**.

Choose the Correct Analysis Exam

The Choose the Correct Analysis Exam will include ten multiple-choice items worth four points each. Most items consist of a detailed description of a research study. Your task will be to identify the correct statistical analysis for the study. The exam is open-book. The resource that students will use to answer the exam questions is the Statistics Organizer on pages 463-574 of the textbook. Students may refer to the textbook chapters as well if necessary. The Choose the Correct Analysis Exam will count **40 points**.

MindTap Assignments and Activities

As stated earlier, students will complete assignments on MindTap, the website that accompanies the textbook. MindTap assignments are listed in MindTap. Your MindTap grade will be equal to three times the average that appears in your MindTap grade book. For example, if a student's MindTap gradebook shows that s/he averaged 90% on MindTap assignments, his/her MindTap grade will be 3 x 90, or 270 points. Thus, the maximum possible grade for MindTap assignments is **300 points**.

Other Assignments and Activities

Academic Integrity Pledge

One of the assignments in this course is an Academic Integrity Pledge. You will be required to download the pledge, sign it, and upload it along with a copy of your HCC student ID or another form of photo identification with identifying information, such as driver's license numbers, obscured. The pledge will count **10 points**.

Extra Credit

I will post extra credit opportunities throughout the semester. Be sure that your Canvas notification settings enable you to receive alerts when I post announcements. See Final Exam Practice Quiz below for additional information about extra credit.

Comprehensive Final Exam

Respondus LockDown Browser

The Comprehensive Final Exam Practice Quiz and the Comprehensive Final Exam will be administered in Respondus LockDown Browser. To use it, you need to install it on your computer. You can download the browser here:

https://www.respondus.com/lockdown/download.php?id=355612798

Note: LockDown Browser is not compatible with the Chromebook operating system.

Final Exam Practice Quiz

The Practice Quiz consists of 20 questions. The time limit is 30 minutes. Students are allowed unlimited attempts, and only the highest score counts. The Practice Quiz counts for up to 10 points extra credit. For example, a student whose highest score is 18/20 correct (90%) will receive 9 points.

Final Exam

All students in PSYC 2317 are required to take a comprehensive final exam. The exam will be administered on Canvas (See Course Calendar for availability and due dates). The exam will count **200 points**.

• Final Exam time limit: 120 minutes

100 questions

• 2 points per question

• Number of attempts allowed: 1

Question presentation mode: One question at a time

Ouestions locked after answering

Students may not review questions and answers

• Correct answers are not provided.

Students who are absent from the final exam must discuss their absence with the instructor in advance or within 24 hours afterward. Students who do not do so will receive a zero on the exam.

Grading Formula

I use a points-based grading system with a maximum 1,000 total points possible.

Written Assignment(s)	150
Exams	340
MindTap Assignments and Activities	300
Other Assignments and Activities	10
Comprehensive Final Exam	200
Total	1,000
Maximum Extra Credit	25

Grade	Total Points
Α	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/

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.

Course Calendar

Week		Topic/What's due
1	8/26-	Academic Integrity Pledge
	9/1	Chapter 1: Introduction to Statistics
		Chapter 2: Frequency Distributions
		MindTap Assignment 1
	9/2-	9/2 Labor Day Holiday
	9/8	9/3 Census Day
2		Chapter 3: Central Tendency
_		MindTap Assignment 2
		Show Your Work Exam 1 opens at 12:00 a.m. on 9/6
	0.40	Show Your Work Exam 1 due by 11:59 p.m. on 9/8
	9/9-	Chapter 4: Variability
3	9/15	Chapter 5: Z-Scores: Location of Scores and Standardized Distributions
	9/16-	MindTap Assignment 3
	9/16-	Chapter 6: Probability Chapter 7: Probability and Samples: The Distribution of Sample Means
	9/22	Chapter 8: Introduction to Hypothesis Testing
4		MindTap Assignment 4
7		MindTap Assignment 5
		Show Your Work Exam 2 opens at 12:00 a.m. on 9/20
		Show Your Work Exam 2 due by 11:59 p.m. on 9/22
	9/23-	Chapter 9: Introduction to the t Statistic
5	9/29	Chapter 10: The t Test for Two Independent Samples
5	,	Chapter 11: The t Test for Two Related Samples
		MindTap Assignment 6
	9/30-	Presidents Day
	10/6	9/30 Last Day to Withdraw
6		Chapter 12: Introduction to Analysis of Variance
		MindTap Assignment 7
		Abstract Summaries 1, 2, and 3 due by 11:59 p.m. on 10/6
_	10/7-	Chapter 13: Repeated-Measures and Two-Factor Analysis of Variance
7	10/13	Chapter 14: Correlation and Regression
		MindTap Assignment 8

		Chapter 15: The Chi-Square Statistic
		MindTap Assignment 9
		Show Your Work Exam 3 opens at 12:00 a.m. on 10/11
		Show Your Work Exam 3 due by 11:59 p.m. on 10/13
	10/14-	Comprehensive Final Exam Practice Test opens at 12:00 a.m. on 10/14
	10/20	Comprehensive Final Exam Practice Test due by 11:59 p.m. on 10/15
		Choose the Correct Analysis Exam opens at 12:00 a.m. on 10/14
8		Choose the Correct Analysis Exam due by 11:59 p.m. on 10/17
		Comprehensive Final Exam opens at 12:00 a.m. on 10/18
		Comprehensive Final Exam due by 11:59 p.m. on 10/19
		Late work deadline 11:59 p.m. on 10/19

Instructor's Practices and Procedures

Missed Assignments

I accept late work. A penalty equal to 10% of the point value will be applied to each late submission. All late work must be submitted by the "Late Work Due Date" in the Course Calendar. Click "Grading Formula" in Canvas for more detailed information.

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.

One of the assignments in this course is an Academic Integrity Pledge. You will be required to download the pledge, sign it, and upload it along with a copy of your HCC student ID or another form of photo identification. I will hold you to your pledge by applying the following penalties for violations:

First Offense: Grade of 0 on the assignment

Second Offense: Grade of 0 on the assignment and a total points penalty of 100 points

Third Offense: Grade of 0 on the assignment, total points penalty of 100 points, and referral to the Dean of Students for disciplinary action

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

The law requires HCC to submit an official class roll on a fixed date that varies by term (see "Census Day" in the Course Calendar). To avoid being reported as "Never Attended," you must log in to the course and complete the assignments and activities that are due before Census Day. If you decide that withdrawing from the course is your best option, you need to do so by the "Last Date to Withdraw" in the Course Calendar. If you simply stop logging in and completing work, you will receive a grade of FX at the end of the semester.

Student Conduct

I expect students to behave in a courteous and professional manner in all interactions with each other and with me

Instructor's Course-Specific Information

Please practice professional courtesy by addressing me as "Dr. Boyd" in your emails and other communications. Much of the work in this course will be automatically graded, so you should have no difficulty keeping track of your performance. For assignments that require manual grading, such as the video journals, please allow one week before expecting feedback.

Psychology Program Information

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

Psychology Field of Study

The Field of Study curriculum for Psychology is an 18-credit-hour set of lower division courses that must be applied to a bachelor's degree in Psychology, regardless of degree designation. If a student successfully completes a field of study for an established degree program, the student may transfer that block of courses for full academic credit. The transferred field of study courses must be substituted for the receiving institution's lower-division requirements for the discipline degree program into which the student transfers. If a student completes only part of the field of study, then credit for those courses must also apply toward the major.

- PSYC 2301 General Psychology
- PSYC 2314 Lifespan Growth & Development
- PSYC 2317 Statistical Methods in Psychology
- PSYC 2319 Social Psychology
- PSYC 2320 Abnormal Psychology
- PSYC 2330 Biological Psychology

Associate in Science in Psychology

HCC students may earn an Associate in Science (A.S.) degree in psychology by completing the approved <u>degree plan</u> (<u>https://learning.hccs.edu/programs/psychology/majoring-in-psychology-1</u>).

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.

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

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints. https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/

Department Chair Contact Information

Dr. Karen Saenz Karen.Saenz@hccs.edu 713-718-7034