



**Critical Thinking in Psychology – 22xxx – PSYCH10xx – 00x**  
**Credit Hours: 3.0 – Fall/Spring 202x**

**Class Time/location:** Tue and Thu (Weiss Hall B03x): 2:00 – 3:20pm

**Instructor:** Isabelle Chang, Ph.D. **TA:** TBA

**Office:** Weiss Hall Room 5xx

**Office Hours:** Tue: 10:30 – 11:30am

**Office Hours:** TBA

Fri: 12:00 – 2:00pm

[Sign up time slots in Canvas “Calendar”]

**email:** [isabelle.chang@temple.edu](mailto:isabelle.chang@temple.edu)

**email:** [TBA](mailto:TBA) <mailto:jay.bradford@temple.edu>

**Required Text:** Morling, B. (2021). *Research methods in psychology: Evaluating a world of information* (4<sup>th</sup> ed.). Norton. ISBN: 978-0-393-89370-0

[Note: Your ebook and InQuizitive account is good for 720 days when you make the purchase. You will use the same set of material for this course and [PSYCH3096: Conducting Psychological Research](#). Both are required courses.]

**Course Description:**

How do you evaluate the strength of a claim made in a magazine, news program, or research article? This course will provide you with crucial skills and information to systematically critique claims and research in the popular press and research literature. You will be introduced to important research concepts, such as correlation vs. causation, common biases, hypotheses, dependent/independent variables, validity, and reliability. You will apply this knowledge while evaluating a wide range of ideas and research in psychology.

**Course Learning Objectives:**

At the end of the semester, you will be able to:

#	Learning Objectives
LO1	Explain what it means to reason empirically.
LO2	Describe five habits that define the work of scientists.
LO3	Explain why all scientists, including psychologists, value research-based conclusions over beliefs based on experience, intuition, or authority.
LO4	Distinguish between legitimate journalism and disinformation in popular media. Discover how to search for research articles in psychology using various search engines.
LO5	Differentiate a framework of “Four Big Validities” (construct, internal, external, and statistical) to pose systematic questions about the evidence behind different research claims.
LO6	Distinguish research claims in both popular and scientific sources, and classify them as frequency, association, or causal claims.
LO7	Apply and comply with ethical guidelines (e.g., APA Ethical Principles of Psychologists and Code of Conduct) for research in psychology. Recognize the similarities between the Belmont Report’s principles and the five APA Ethical Principles.
LO8	Articulate some of the ways that ethical decision making requires balancing priorities, such as research risks versus benefits, rights of individual participants versus societal gains, free participant versus coercion.
LO9	Explain ways to increase the construct validity of questions by preventing respondent shortcuts (i.e., yea-saying) or biases (i.e., trying to look good).

LO10	Interrogate the construct validity of a study's measured variables.
LO11	Explain how carefully prepared questions improve the construct validity of a poll or survey.
LO12	Describe how researchers can make observations with good construct validity.
LO13	Explain why external validity is essential for most frequency claims.
LO14	Describe which sampling techniques allow generalizing from a sample to a population of interest, and which ones do not.
LO15	Explain that measured variables, not any particular statistic, make a study correlational.
LO16	Interrogate the construct validity and statistical validity (and, of lower priority, external validity) of an association claim.
LO17	Classify experiments as independent-groups and within-groups designs and explain why researchers might conduct each type of study.
LO18	Evaluate three potential threats to internal validity in an experiment—design confounds selection effects, and order effects—and explain how experimenters usually avoid them.

Types of Validity	Construct	Statistical	Internal	External
Claims	Frequency	Frequency	Frequency	Frequency
	Association	Association	Association	Association
	Causal	Causal	Causal	Causal

### Office Hours [T with your Instructor]:

I am available to help you succeed in this course. Meetings can be via Zoom or in person. You can sign up for a time slot [T with your Instructor] that works for you in Canvas "Calendar." In the event that none of the time slots is convenient for you, please email me to arrange a specific time so that we can meet individually. Contact by e-mail is preferable whenever possible. When contacting me, please use "PSYCH1004" in the subject line and remember to include your **name** in the email, and please allow 24-48 hours for a response to your questions or concerns. You are also encouraged to approach me at the end of class with questions or to make an appointment to discuss your questions or concerns.

### Academic Expectations

- Develop an academic plan.
- Read and understand the syllabus.
- Develop your own set of study skills and use them regularly.
- Come to class prepared.
- Take full advantage of available academic resources.
- Participate in your own education.
- Adhere to the Temple University Student Conduct Code.  
[<https://secretary.temple.edu/sites/secretary/files/policies/03.70.12.pdf>]
- Keep a healthy mind and body.

### Attendance and Your Health:

The University continues to meet the changing circumstances of the COVID-19 pandemic with flexibility and by working together as a community. To achieve course learning goals, students are encouraged to attend and participate in classes, according to the course' requirements. However, if you feel unwell or if you are under quarantine or in isolation because you have been exposed to the virus or tested positive for it, you should prioritize your health. As always, I will turn on Zoom and record every lecture during the semester to increase inclusiveness. Therefore, (1) If your condition permits, you can join us via Zoom. (2) If not, you can watch the videos by clicking "Zoom" and then "Cloud Recording" when your health permits. In this case, you can submit your class assignments (often related to class activity

to increase your engagement) by then. However, please review the University attendance policies in this link <https://bulletin.temple.edu/undergraduate/academic-policies/attendance/> [Bulletin 2022-2023]

### Course Policies

#### **Class Preparation:**

This class meets 3 hours a week. You are expected to read the assigned text prior to each class meeting, a minimum 4 to 6 hours of preparation (reading, reflecting, preparing assignments, reviewing notes, preparing for tests, etc.) per week. It is very important that you read the text closely. Attendance is highly recommended, as material covered in lecture may not be included in the textbook but will be included in exams. Although this is a lecture class you are encouraged to familiarize yourself with the material and participate throughout the semester. My experience shows that students who interact with one another and familiarize themselves with the course material assimilate it better and enjoy the class much more. Assigned readings are listed in this syllabus. Additional required and supplemental readings will be posted on the course website.

#### **Assessment:**

**Exams** (120 points, 40 points each): There will be 3 online Canvas exams during the semester, worth 40 points each consisting of 40 multiple choice questions. The correct answers will display at the end of the exam. Exams will *not* be cumulative. All exams will be online. The dates and times of all scheduled exams are listed below and in the course schedule. Please plan on attending all three scheduled exams. The Canvas will provide item analysis statistics that are used in determining your grade. For each exam, any “bad” (e.g., invalid, unreliable, poor or negative discriminator) questions will be removed from calculations. The percentage of correct responses will be your grade for the exam.

**Important:** If you have an emergency situation that prevents or will prevent you from taking an exam or submitting an assignment on-time, please advise me as soon as you are able so that we can make alternative arrangements.

#### Exam Schedule

Exam	Exam I	Exam II	Final Exam
<b>Date</b>	Tue, September 27	Tue, November 01	Tue, December 13
<b>Time</b>	2:00 – 3:20	2:00 – 3:20	1:00 – 3:00
<b>Chapters Covered</b>	1, 2, and 3	4, 5, and 6	7, 8, and 10

**Quizzes** (45 points, 15 points each): There will be 3 Canvas quizzes throughout the semester, worth 15 points each. Quizzes are scheduled one week before the exams with the intent to help you to prepare for your exams. Quizzes will consist of 15 multiple choice questions. You can have **two** attempts (60 minutes each) within a one-week window period for each Canvas quiz. You keep the **higher** of the two scores. The correct answers will display at the end of the window time.

**InQuizitive** (90 points, 10 points each): There will be assignments throughout the semester to reinforce the material covered in class. These homework assignments are essential to your success in this course. For each assignment, be sure to read the textbook carefully before doing the exercises. Pay careful attention to the explanations, examples and illustrations in the text; they will serve as additional reinforcement to prepare you to do the exercises. Please pay close attention to the due date and time. Feedback will be provided by the InQuizitive immediately after submissions.

**Class Activities** (90 points, 10 points each): I have created many activities for this course. A group of students will work together to solve problems and generate completed projects. Each student will discuss and explain the assignment to others and complete it together. However, each of you must submit your own individual assignment and graded assignments will be returned within 48 hours.

**Exam Wrappers** (4 points, 2 points each): After two of three exams during the semester (except the final), I will post a self-evaluation survey (“Wrapper”) in Canvas. Approximately five items in both multiple-choice and essay formats will be included in each of the self-evaluation forms. Studies show that reflections can increase students’ self-regulation skills and impacted learning (e.g., Dahlgren, 2020).

**Meet and Greet:** Welcome to the course! [Details in “Discussions”] (10 points)

**Attendance/participation:** 28 points for 28 in-person class meetings. I understand speaking up in class can be intimidating, but it is a critical skill for learning. However, most of our class discussions involved topics that you can easily relate to such as our local sports teams’ statistics and favorite sports players, national news, and animated shows. Your participation in the conversation can surely animate almost everybody in the classroom!

### **Expectations for Class Conduct:**

It is important to foster a respectful and productive learning environment that includes all students in our diverse community of learners. Our differences, some of which are outlined in the University's nondiscrimination statement, will add richness to this learning experience. Therefore, all opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse.

Treat your classmates and instructor with respect in all communication, class activities, and meetings. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Please consider that sarcasm, humor and slang can be misconstrued in online interactions and generate unintended disruptions. Profanity should be avoided as should the use of all capital letters when composing responses in discussion threads, which can be construed as “shouting” online. Remember to be careful with your own and others’ privacy. In general, have your behavior mirror how you would like to be treated by others.

### **Student Support Services:**

The following academic support services are available to students:

Support Services	Web Address
Student Success Center	<a href="https://www.temple.edu/online/student-resources/student-success-center">https://www.temple.edu/online/student-resources/student-success-center</a>
Library Services	<a href="https://www.temple.edu/online/student-resources/library-services">https://www.temple.edu/online/student-resources/library-services</a>
Disability Resources and Services	<a href="https://www.temple.edu/online/student-resources/disability-resources-and-services">https://www.temple.edu/online/student-resources/disability-resources-and-services</a>
Tuttleman Counseling Services	<a href="https://counseling.temple.edu/">https://counseling.temple.edu/</a>
Student Health Services	<a href="https://studenthealth.temple.edu/">https://studenthealth.temple.edu/</a>
Cherry Pantry	<a href="https://studentcenter.temple.edu/cherry-pantry">https://studentcenter.temple.edu/cherry-pantry</a>
Laptop Share	<a href="https://studentaffairs.temple.edu/student-emergency-aid-fund">https://studentaffairs.temple.edu/student-emergency-aid-fund</a> <a href="https://shopowltech.com/rentals">https://shopowltech.com/rentals</a>

### **Temple Resources:**

#### **Paley Library**

The library offers online resources and individual instruction to help you search for empirical studies and research papers in Psychology. You can contact Rick Lezenby [[rfile@temple.edu](mailto:rfile@temple.edu), Phone (215) 204-4571] in the library for help or [Make an appointment with me calendar](#)

**Disability Statement:**

A disability disclosure statement that invites students to disclose their need for accommodations, such as: Any student who has a need for accommodations based on the impact of a documented disability or medical condition should contact [Disability Resources and Services](#) (DRS) in 100 Ritter Annex ([drs@temple.edu](mailto:drs@temple.edu); 215-204-1280) to request accommodations and learn more about the resources available to you. If you have a DRS accommodation letter to share with me, or you would like to discuss your accommodations, please contact me as soon as practical. I will work with you and with DRS to coordinate reasonable accommodations for all students with documented disabilities. All discussions related to your accommodations will be confidential.

A statement on the [Student and Faculty Academic Rights and Responsibilities Policy](#) (#03.70.02), such as: Freedom to teach and freedom to learn are inseparable facets of academic freedom.

**Canvas Course Website:**

This class will require that you access the course website regularly. I have set up a Canvas website for the course; if you are formally enrolled in the course you should have access to this site. If you are unable to access the site, please contact me as soon as possible. You can access the site by typing "canvas.temple.edu" into your web browser, or you can access it through TUPortal. PSYCH1004/ Critical Thinking in Psychology should be listed as one of your courses; just click to enter the site.

Each week, I will post PowerPoint slides of lecture notes. Please note that these slides will not be as complete as those presented in lecture, so it is still recommended you take some notes during class. The Canvas site will also be used to post announcements, grades, study guides, class activities, discussion boards, and additional readings. Some readings will be added to supplement the textbook. As these will be required, it is highly recommended that you check the Canvas site regularly to stay up to date.

**Academic Honesty:** (<https://bulletin.temple.edu/undergraduate/about-temple-university/student-responsibilities/#academichonesty>)

*The Temple University community believes strongly in academic honesty and integrity. Essential to intellectual growth and the university's core educational mission is the development of independent thought and respect for the thoughts of others. Academic honesty fosters this independence and respect. Academic dishonesty undermines the university's mission and purpose and devalues the work of all members of the Temple community. Every member of the university community is responsible for upholding the highest standards of academic honesty at all times. Students, as members of the community, are responsible for adhering to the principles of academic honesty and integrity.*

*Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling or distribution of term papers or other academic materials. Normally, all work done for courses — papers, examinations, homework exercises, laboratory reports, oral presentations — is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources — journals, books, or other media — these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources — suggestions for organization of ideas, ideas themselves, or actual language — must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.*

*Cheating includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) use of sources beyond those authorized by the instructor in writing papers,*

preparing reports, solving problems, or carrying out other assignments; (3) the acquisition, without permission, of tests or other academic material belonging to a member of the university faculty or staff; (4) engaging in any behavior specifically prohibited by a faculty member in the course syllabus, assignment, or class discussion; (5) or otherwise engaging in behavior that gives the student an unfair academic advantage including, but not limited to, fabrication of data or sources, resubmitting work already submitted for another academic requirement without prior authorization, or other similar behavior.

Refer to the Student Conduct Code (policy # 03.70.12) for more specific definitions of cheating and plagiarism.

The penalty for academic dishonesty can vary from receiving a reprimand and a failing grade for a particular assignment, to a failing grade in the course, to suspension or expulsion from the university. The penalty varies with the nature of the offense, the individual instructor, the department, the school or college, and the Office of Student Conduct and Community Standards.

Students who believe that they have been unfairly accused may appeal through the school or college's academic grievance procedure. For more information see <https://bulletin.temple.edu/undergraduate/about-temple-university/student-rights/#grievances>.

#### Grading:

Course grade percentages will be calculated by dividing the points earned by the total points offered in the course.

$$\text{Percentage} = \frac{\text{Points Earned}}{\text{Total Possible Points}}$$

Assignments	Possible Points
3 Exams	120
3 Quizzes	45
InQuizitive	90
Class Activities	90
Attendance/Participation	28
Exam Wrappers	4
Meet and Greet	10
[Note: Every point that you have earned carries equal weight. Every point is equally important.]	
<b>TOTAL POSSIBLE POINTS</b>	<b>387</b>

Grades are non-negotiable. Final letter grades for the course will be assigned based on the percentage ranges below.

Grd	Range	Grd	Range	Grd	Range	Grd	Range
		<b>B+</b>	87.00 – 89.99%	<b>C+</b>	77.00 – 79.99%	<b>D+</b>	67.00 – 69.99%
<b>A</b>	94.00 – 100.00%	<b>B</b>	84.00 – 86.99%	<b>C</b>	74.00 – 76.99%	<b>D</b>	64.00 – 66.99%
<b>A-</b>	90.00 – 93.99%	<b>B-</b>	80.00 – 83.99%	<b>C-</b>	70.00 – 73.99%	<b>D-</b>	61.00 – 63.99%
						<b>F</b>	≤ 60.99%

**Extra Credit:** Extra credit opportunities may or may not be offered at the instructor's discretion. If any extra credit opportunity is offered, it will be directly related to the class material and will be available to



all students in the class. Individual extra credit inevitably leads to inequities therefore no individual extra credit opportunities will be permitted.

**Policy on Religious Holidays:** *Policy on Religious Holidays: If you will be observing any religious holidays this semester which will prevent you from attending a regularly scheduled class or interfere with fulfilling any course requirement, I will offer you an opportunity to make up the class or course requirement if you make arrangements by informing me of the dates of your religious holidays within two weeks of the beginning of the semester (or three days before any holidays which fall within the first two weeks of class).*

**Policy on Incomplete (I) Grades:** (policy # 02.10.13)

<https://bulletin.temple.edu/undergraduate/academic-policies/incomplete-coursework/>

*An instructor will file an "I" (Incomplete) only if the student has completed the majority of the work of the course at a passing level, and only for reasons beyond the student's control.*

*An instructor may file an "I" when a student has not completed the work of a course by the time grades must be submitted, but has completed the majority of the work at a passing level and has a written agreement with the instructor and the department regarding completion of the work, including the nature of the work to be completed, the means by which the final grade will be determined, and the date by which the work must be completed. The completion date may be no later than one year from the end of the semester in which the student took the course. The agreement shall also specify a default grade to be received if the work is not completed by the date indicated. One copy of the agreement shall be retained by the instructor, one shall be given to the student, and one shall be filed with the department office or, in colleges or schools without departments, the Dean's office.*

*When reporting the grade of "I" for a student, the instructor shall also file a report of the default grade in the electronic grading system. If the instructor does not change the grade of "I", pursuant to the agreement with the student, by the end of one year from the time the grade of "I" was awarded, the appropriate University official shall automatically change the grade of "I" to the reported default grade, and the default grade shall appear on the transcript and be used for all other grading purposes as the actual grade received in the course.*

*Faculty advisors and staff advisors have the option of not permitting a student to register for an "overload" if the student is carrying one or more active incomplete courses, or for a "full load" if the student is carrying two or more active incompletes.*

### **Controversial and Personal Subject Matter:**

The material covered in the readings, lectures, and discussions in this course may be considered controversial by some students. Our purpose in this class is to explore challenging subject matter and consider multiple perspectives and arguments. You are expected to contribute to the course and expected to listen to the instructor and classmates with respect. You are free to disagree, respectfully, with views expressed in class or in assigned readings. Please refrain from discussing confidential or personal experiences of psychological disorders in class. If you are interested in presenting such information, you are required to do so in a way that protects the identity of yourself or the person you are discussing. Students seeking psychological services are referred to the Temple University Psychological Services Center: 1509 Cecil B Moore Ave. E.C.E.C. Building, Room 420; phone: (215) 204-7100 or Tuttleman Counseling Services: 1700 N. Broad St., 2<sup>nd</sup> floor; phone: (215) 204-7276. <https://counseling.temple.edu/contact-us> Office hours: 8:00am-5:00pm; Access hours for Remote Registration: 11:00am-1:00pm Monday through Friday.





### Course Schedule and Assigned Reading

Day	Date	Topic	Assigned Reading
Tue	08/23	Course Overview and syllabus	
Thu	08/25	Chapter 1: Psychology Is a Way of Thinking	Chapter 1
Tue	08/30	Chapter 1: Psychology Is a Way of Thinking Activity [Phillies Salaries and Batting Ave] LO1, LO2	Chapter 1
Thu	09/01	Chapter 2: Sources of Information: Why Research Is Best and How to Find It	Chapter 2
Tue	09/06	Chapter 2: Sources of Information: Why Research Is Best and How to Find It	Chapter 2
Thu	09/08	Chapter 2: Sources of Information: Why Research Is Best and How to Find It Activity [Cherry-Picking] LO3, LO4	Chapter 2
Tue	09/13	Chapter 3: Three Claims, Four Validities: Interrogation Tools for Consumers of Research	Chapter 3
Thu	09/15	Chapter 3: Three Claims, Four Validities: Interrogation Tools for Consumers of Research Activity [Tilt Your Head Down] LO5, LO6	Chapter 3
Tue	09/20	Chapter 3: Three Claims, Four Validities: Interrogation Tools for Consumers of Research <b>Quiz 1 opens</b>	Chapter 3
Thu	09/22	Chapter 4: Ethical Guidelines for Psychology Research <b>Quiz 1 closes at 11:59pm, Mon, 09/26</b>	Chapter 4
Tue	09/27	<b>Exam I (Chapters 1, 2, and 3)</b>	
Thu	09/29	Chapter 4: Ethical Guidelines for Psychology Research <b>Exam I Wrapper Due 1:59pm, Thu. 1:59pm, 09/29</b> Activity [Temperature data as quasi-exp] LO7, LO8	Chapter 4
Tue	10/04	Chapter 5: Identifying Good Measurement	Chapter 5
Thu	10/06	Chapter 5: Identifying Good Measurement Activity [Accurately Counting Sea Turtles] LO9, LO10	Chapter 5
Tue	10/11	Chapter 5: Identifying Good Measurement	Chapter 5
Thu	10/13	Chapter 6: Surveys and Observations: Describing What People Do	Chapter 6
Tue	10/18	Chapter 6: Surveys and Observations: Describing What People Do	Chapter 6

		Activity [Long-Term Memory in Birds]	LO11, LO12	
Thu	10/20	Chapter 6: Surveys and Observations: Describing What People Do		Chapter 6
Tue	10/25	Chapter 7: Sampling: Estimating the Frequency of Behaviors and Beliefs <b>Quiz 2 opens</b>		Chapter 7
Thu	10/27	Chapter 7: Sampling: Estimating the Frequency of Behaviors and Beliefs <b>Quiz 2 closes at 11:59pm, Mon, 10/31</b>		Chapter 7
Tue	11/01	<b>Exam II (Chapters 4, 5, and 6)</b>		
Thu	11/03	Chapter 7: Sampling: Estimating the Frequency of Behaviors and Beliefs <b>Exam II Wrapper Due 1:59pm, Thu. 1:59pm, 11/03</b> Activity[Sampling Bias Behind Yelp Ratings] LO13, LO14		Chapter 7
Tue	11/08	Chapter 8: Bivariate Correlational Research		Chapter 8
Thu	11/10	Chapter 8: Bivariate Correlational Research Activity [Dog People Live Longer] LO15, LO16		Chapter 8
Tue	11/15	Chapter 8: Bivariate Correlational Research		Chapter 8
Thu	11/17	Chapter 10: Introduction to Simple Experiments Activity [Saturated Fat Can Impair Concentration] LO17, LO18		Chapter 10
Tue	11/22	<b>Fall Break (no classes held)</b>		
Thu	11/24	<b>Thanksgiving holiday (no classes held)</b>		
Tue	11/29	Chapter 10: Introduction to Simple Experiments		Chapter 10
Thu	12/01	Chapter 10: Introduction to Simple Experiments <b>Quiz 3 opens</b>		Chapter 10
Tue	12/13	<b>Final Exam 1:00 – 3:00pm (Chapters 7, 8, and 10)</b> <a href="https://registrar.temple.edu/sites/registrar/files/OUR_Fall_Final_Exams.pdf">https://registrar.temple.edu/sites/registrar/files/OUR_Fall_Final_Exams.pdf</a> <b>Quiz 3 closes at 11:59pm, Mon, 12/12</b>		

**\*\*\*Respect others, love learning, and accept personal responsibility\*\*\***

*\*Note: I reserve the right to modify this schedule.\**