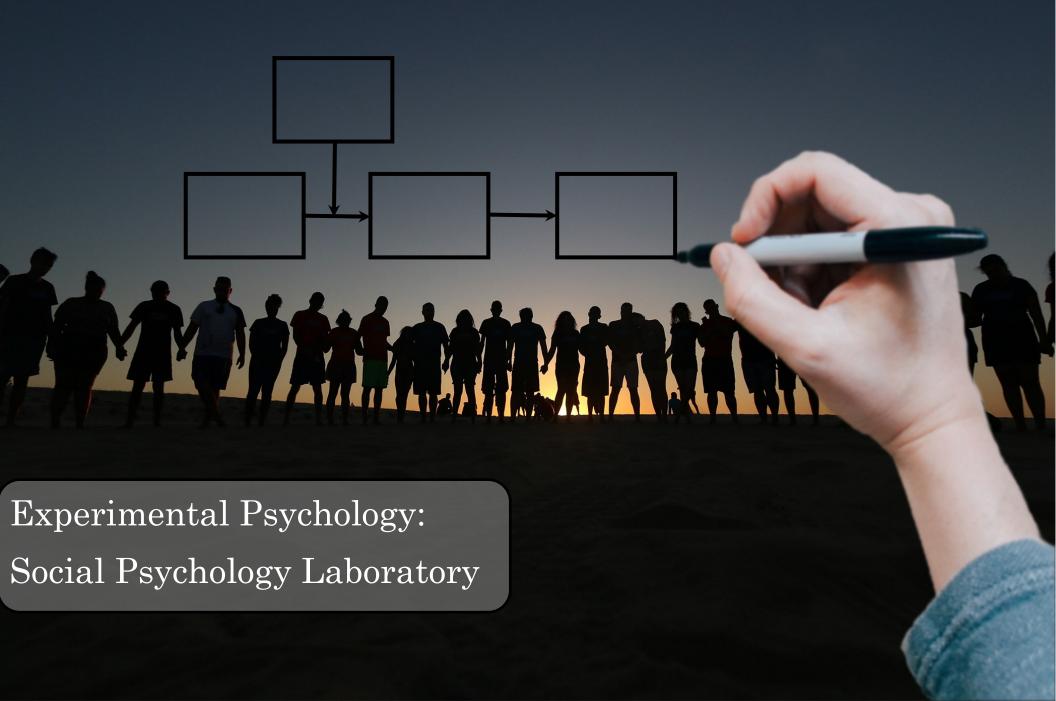


PSYC 420 Spring 2021 Dr. Edward Lemay



#### **Instructional Team**

#### **Course Instructor:**

Edward Lemay elemay@umd.edu Zoom room: 918 009 6949

Dr. Lemay is Professor of Psychology at the University of Maryland. He received his Ph.D. in Social Psychology from Yale University.

Dr. Lemay is director of the Interpersonal Relationships Lab. Research in the lab examines cognition, emotion, behavior, and

motivation within the context of close interpersonal relationships and social interactions. He has authored over 80 publications, including papers in outlets such as the Journal of Personality and Social Psychology, Personality and Social Psychology Bulletin, Journal of Experimental Social Psychology, and Psychological Science.

Dr. Lemay serves on numerous editorial boards in social-personality psychology, and is Associate Editor for *Personality and Social Psychology Bulletin*. He received several dissertation awards, the Caryl E. Rusbult Early Career Award from Society for Personality and Social Psychology, and the Gerald Miller Early Career Award from the International Association for Relationships Research. In addition, he was nominated as a "Rising Star" and Fellow by the Association for Psychological Science.

Dr. Lemay is passionate about teaching in general, and about teaching this course in particular, given that it combines several of his intellectual passions: social psychology, developing conceptual models, and empirical research.

#### **Teaching Assistant:**

Joshua Ryan, MS josheverettryan@gmail.com Zoom room: 618 148 1171

Josh Ryan is a fifth-year doctoral student in the Social, Decision, & Organizational Sciences (SDOS) program in the Psychology department. He works in the Interpersonal Relationships Lab, conducting research on phenomena related to interpersonal relationships. Specifically, his projects investigate how people navigate conflicts of interest that arise in their



relationships. He employs a variety of techniques in his research, including mediation and moderation – techniques that you will learn in this course.

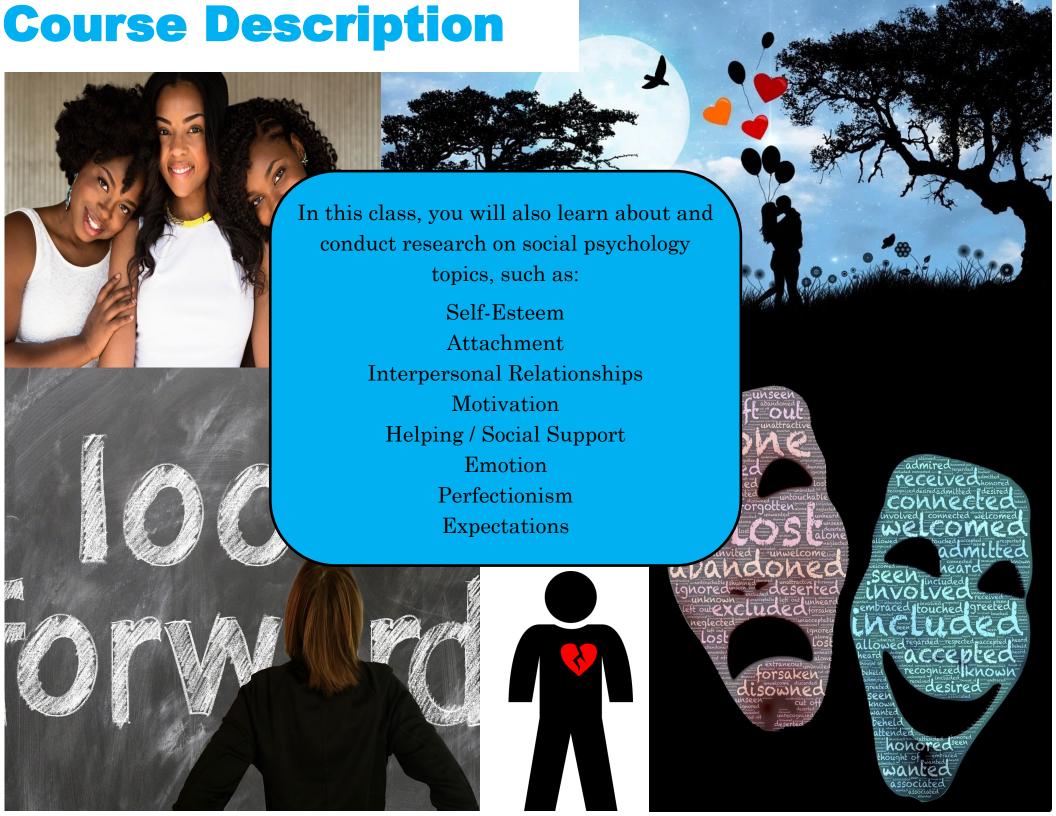
### **Course Description**



The aim of this course is to give you additional exposure to research methods in social psychology so you can become competent consumers and producers of social psychology research. This class takes a "hands on" approach to learning about social psychology research. You will produce your own research, analyze data, deliver a presentation of the research, and write a research report. This class meets twice weekly for lecture and once weekly for lab. The lab provides you with the opportunity to apply and extend the material learned in lecture. You will learn about and gain experience with all aspects of psychological research, such as developing a research hypothesis, constructing measures, data collection, data analysis and interpretation, writing, and presentation. In addition, you will learn about advanced social psychology research methods (e.g., priming, implicit measures, coding, dyadic analysis, experience sampling), and advanced analytical techniques (e.g., mediation and moderation analyses). You will apply your learning in an original research project using real research data. In addition, you will help collect research data to test a novel research hypothesis.

Most lecture meeting will take place via Zoom and will be synchronous (i.e., live). Most lab meetings will be asynchronous, involving activities that you complete independently.

Note. You should have completed PSYC 300 (Research Methods in Psychology) and PSYC 221 (Social Psychology) before you take this course. Please consult with the instructor if you have not already taken these classes.



## **Learning Objectives**

The learning objectives for this course are based on the UMD Department of Psychology's learning outcomes, which include developing students' abilities in the following areas:

- Research methods
- Critical thinking
- Communication
- Content

Specific course learning objectives include proficiency in:

- Conducting literature searches/reviews
- Critical consumption of existing research
- Hypothesis generation
- Writing in APA-style
- Creating and delivering professional research presentations
- Research design
- Data collection
- Carrying out statistical analyses (e.g., correlation, regression) in SPSS and JASP



#### **Time and Place**

Office hours: Rather than holding the same office hours every week, which may not work with your schedule, we will arrange meetings with you as the need arises. Feel free to contact one of us to arrange a meeting. We will meet over Zoom (see meeting ID on first page).

**Lecture meetings:** The lecture meetings will be synchronous (i.e., live) and will take place over Zoom (meeting ID: 918 009 6949). These meetings will be held on Monday and Wednesday from 11 to 11:50.

Lab meetings: Most lab meetings will be asynchronous (i.e., involving independent work) and the TA will be available during the scheduled lab time if you need to consult (Zoom meeting ID: 618 148 1171). See course schedule for exceptions. Live lab meetings will be held on Thursdays from 12 to 1:50. The Zoom meeting ID for these meetings varies, and is indicated in the course schedule.



In an effort to approximate in -person interactions, please arrive to Zoom meetings with cameras and microphones on.



#### **Materials**

**ELMS Course Page:** This page will be used to obtain information on grades, rubrics, homework assignments, course announcements, videos, lecture slides, activity assignments, and Zoom links.



#### Reading Material:

**Required text:** Research Methods for the Behavioral Sciences by Stangor (5th edition). ISBN#: 978-1-285-07702-4. This book should be available at the UMD bookstore.

**Recommended text:** APA Publication Manual (7th edition) is recommended. This will be a useful resource when you are working on your research paper and lab assignments, and should be available at the UMD bookstore.

Additional supplemental readings: Additional required supplemental readings are listed on the course schedule and are posted on the ELMS course page. Optional / recommended readings are listed separately at the end of this syllabus. These readings would further enhance your learning and are recommended if you have time.

**Software:** You can complete most assignments using SPSS or JASP. I would recommend gaining access to both of them so you can learn analyses using both packages. Note that a couple of assignments will require SPSS.

SPSS: UMD students can purchase SPSS from the Terrapin Technology Store for \$60. See this site: <a href="http://terpware.umd.edu/Windows/Title/1880">http://terpware.umd.edu/Windows/Title/1880</a>. In addition, Office of Academic Computing Services offers a virtual cloud lab, which will allow you to log in to the campus network and access SPSS remotely at no charge. Instructions will be provided via ELMS.

JASP: You can download JASP for free here: https://jasp-stats.org/

## **Assignments and Grading**

Your learning of course material and accomplishment of the course objectives will be demonstrated by your performance on the tasks listed below. Along with each listed task there is an indication of its contribution to the final grade. The plus/minus system will be used for grading, as indicated below. Note that final course grades will not be rounded up.

		-		+
lidterm Exam: 25%	A	90.00%	93.00%	97.00%
Quizzes: 20%	В	80.00%	83.00%	87.00%
Labs: 10%	$\mathbf{C}$	70.00%	73.00%	77.00%
Homework: 20%	D	60.00%	63.00%	67.00%
Research Project: 25%	F		<60.00%	

**Midterm Exam:** The midterm exam will be open-book and will consist of multiple-choice questions regarding the assigned readings and lecture material. This exam must be taken during class time on the day it is scheduled, and will be completed on ELMS. See course schedule. The class meeting before the midterm will be reserved for a review session. Note the unique format of the midterm exam for online administration: one question at a time will be presented, without the ability to change your answer after submitting it.

**Quizzes:** Throughout the semester, you will be asked to complete four quizzes. The quizzes are closed book and will consist of multiple-choice questions regarding the assigned readings and lecture material covered since the prior quiz. The quizzes will be completed on ELMS. Note the unique format of these quizzes for online administration: one question at a time will be presented, without the ability to change your answer after submitting it.

**Labs:** On a weekly basis, you will attend an online lab meeting or complete independent lab activities. Most labs require a submission on ELMS, and these labs will contribute to your final grade.

## **Assignments and Grading (cont.)**

**Homework Assignments:** You will complete 13 homework assignments throughout the semester, and they are indicated on the course schedule. Completed assignments should be uploaded to ELMS.

**Research Project:** You will complete an independent research project in this class. You will develop an original hypothesis related to social psychology, analyze data to test the hypothesis using an existing dataset, interpret the results, write a research proposal and report, and give oral and poster presentations.

The point breakdown for the various components of this project is as follows:

- 1. Research proposal: 20% of research project grade (or 5% of final course grade)
- 2. Oral presentation: 15% of research project grade (or 3.75% of final course grade)
- 3. Poster presentation: 15% of research project grade (or 3.75% of final course grade)
- 4. Final research report: 50% of research project grade (or 12.5% of final course grade)

A detailed description of the project is provided on ELMS. The proposal, report, and presentation files should be submitted via ELMS. The oral and poster presentations will be delivered live on Zoom. You will be scheduled to deliver these on one of the reserved presentation days (see course schedule).

#### **Policies**

**Due Dates:** Assignments are due by the start of class on the day they are assigned unless indicated otherwise (see course schedule). In the event that due dates conflict with the due dates listed on ELMS, please use the due dates listed in this syllabus. These due dates are subject to change and, if a change is needed, you will be informed via a course announcement on ELMS.

Policy on Late Assignments: Unexcused late assignments will receive a 10% deduction per day late, including days on the weekend. For assignments with electronic file submission, it is your responsibility to ensure that you have uploaded the correct file and that it's not corrupt. Submission of incorrect or corrupt files will be considered a non-submission. Missed research presentations cannot be rescheduled given that they require reserved synchronous class time, and so they will receive a grade of zero unless they are supported by a compelling and approved excuse. Documentation for excused absences and late assignments should be provided as a scanned image sent via email.

**Policy on Attendance:** Attending synchronous meetings is highly encouraged because it will improve your learning and performance. However, you do not need to contact us if you are absent from a synchronous meeting. Keep in mind that you are responsible for course material covered in all meetings. You may want to exchange contact information with at least one or two classmates and ask them about any missed information.

**Alternative Assignments:** Alternative assignments to make up for COVID-19 related absences or missed course expectations may be assigned at the instructor's discretion.



Inclusive Learning Environment: Students will be invited to share their thoughts in class and a diversity of opinions is welcome. Respectful communication is expected and supporting positions with research findings is encouraged. In accordance with free speech statues, threats of violence are prohibited. The University of Maryland recognizes the importance of a diverse student body, and we are committed to fostering equitable classroom environments. As a human, behavior-centered discipline, we value a strong understanding of diversity. Diversity refers to differences in race, ethnicity, culture, gender, sexual orientation, religion, age, abilities, class, nationality, and other factors. The Department of Psychology at the University of Maryland is committed to creating a respectful and affirming climate in which all students, staff, and faculty are inspired to achieve their full potential.

Students are invited, if they wish, to indicate how they want to be referred to both in terms of name and pronouns. Additionally, how students identify in terms of gender, race, class, sexuality, religion, and dis/ability, among all aspects of identity, is their choice whether to disclose (e.g., should it come up in classroom conversation). We seek to be respectful of all identities in this course.

We believe that actively fostering an affirming environment strengthens our department as a whole. A department that values and celebrates diversity among its students, staff and faculty is best able to develop the strengths and talents of all members of the department community.

Reporting Incidents of Racism, Hate, and Bias: If students experience racism or other form of bias or hate in this class or any psychology course, we encourage the students to do at least one of the following: report the experience to the instructor and/or send a report to the Department of Psychology's Diversity and Inclusion Committee using this link (https://umdsurvey.umd.edu/jfe/form/SV\_06ZuAUj7eJnQVqR). Note that reports can be made anonymously. Please also report all incidents of hate and bias to the Office of Diversity and Inclusion at https://www.diversity.umd.edu/hbrp/.

#### Policies (cont.)

**Academic Accommodations:** If you have a documented disability and wish to discuss academic accommodations, contact the professor during the first week of the semester.

**Religious Observations:** Students will not be penalized because of observances of religious beliefs. It is the students' responsibility to notify the professor during the first week of the semester if religious observances require course modifications.

Academic Integrity: Academic dishonesty is defined in the undergraduate catalog as cheating, fabrication, facilitation of academic dishonesty, and/or plagiarism. Being a member of a social media platform (e.g., GroupMe) where students are cheating can be considered academic dishonesty, regardless of your intention or level of involvement. All instances of academic dishonesty will be reported to the Office of Student Conduct. Note that there will be no warnings. Students who engage in academic dishonesty will receive 0 points and may receive an XF in the course. Unauthorized collaboration is a form of cheating. You should complete all of your assignments, quizzes, and exams in this course independently, and without consulting with others.

Other policies: Please see the UMD course-related policies site for other policies (http://www.ugst.umd.edu/courserelatedpolicies.html). It is your responsibility to understand your rights and responsibilities as expressed in these policies. This page includes information about valuable resources to support your academic success, as well as your overall health and well-being.

Communication: As you know, this semester is not normal. All of us are dealing with additional stress and anxiety. Please know that we want to do everything we can to support you. To do this, though, we need to know about any problem that you might have keeping up with the course when the problem starts. We don't need to know details. Letting us know sooner rather than later, though, is key. We are in a much better position to help if you tell us when the problem arises. We are here to help.

## **Helpful Tips to Promote Success**

- This is an upper-level research-based course. Plan to dedicate considerable time and energy to this course.
- Participate actively in class meetings, as if you were in class.
- Be on time.
- Turn on your camera.
- Focus on the class (no multitasking, no phones/social media/emails/other distractions during class).
- Engage in course discussions we can learn much from one another.
- Submit assignments early to allow time to address technological difficulties. If you need assistance with Canvas/ELMS or technology, contact the UMD Division of Information Technology (301.405.1500; itsc@umd.edu; umd.service-now.com/itsc). If you need assistance with course concepts, contact the instructor or TA.
- Please note that students will receive feedback on all of the assignments. Review comments on the actual graded assignments (not just in the comments box on Canvas/ELMS) as the feedback will help improve your future work.
- Let us know as soon as possible if difficulties arise so we can support and work with you.

#### **Helpful Resources**

**Support for Basic Needs:** Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in this course, is encouraged to use the resources listed below for support.

Counseling Center: <a href="http://www.counseling.umd.edu/CS/">http://www.counseling.umd.edu/CS/</a>

Fostering Terp Success: <a href="https://umd.edu/fostering-terp-success">https://umd.edu/fostering-terp-success</a>

UMD Campus Pantry: <a href="http://campuspantry.umd.edu/">http://campuspantry.umd.edu/</a>

UMD Student Crisis Fund: <a href="http://www.crisisfund.umd.edu/">http://www.crisisfund.umd.edu/</a>

#### **Additional Resources:**

UMD Accessibility & Disability Support Services: <a href="https://www.counseling.umd.edu/ads/">https://www.counseling.umd.edu/ads/</a>

UMD Office of Civil Rights and Sexual Misconduct (Title IX Office): <a href="https://www.ocrsm.umd.edu/">https://www.ocrsm.umd.edu/</a>

UMD Office of Diversity and Inclusion: <a href="https://www.diversity.umd.edu/hbrp/">https://www.diversity.umd.edu/hbrp/</a>

UMD Writing Center: <a href="https://www.english.umd.edu/academics/writingcenter">https://www.english.umd.edu/academics/writingcenter</a>

## **Course Schedule**

Note. All M/W classes are on Zoom using meeting ID 918 009 6949. All TR labs are asynchronous (i.e., independent activities) except for those indicated as Zoom.

		Торіс	Assigned Reading (by start of class)	Submission (due by start of class)
М	1/25	Course Overview		
W	1/27	Scientific Method; Types of Designs; Descriptive and Correlational Designs	Stangor, Chapter 1 & 9	
TR	1/28	Lab 1: Completing Content Analysis Questionnaire; Literature Searching; Overview of Meta-Analysis		
M	2/1	Descriptive Statistics, Correlation and Simple Regression in SPSS / JASP; Continuous and Dichotomous Predictors	Stangor, Chapter 8; Le & Agnew (2003)	
W	2/3	Relationship Quality	Le et al (2010)	
TR	2/4	Lab 2: Descriptive Statistics, Correlation and Simple Regression in SPSS / JASP		
М	2/8	Multiple Regression in SPSS / JASP	Li & Chan (2012)	
W	2/10	Attachment Insecurity and Self-Esteem	Erol & Orth (2016)	
TR	2/11	Lab 3: Multiple Regression in SPSS / JASP		Quiz 1
М	2/15	Statistical Mediation	Korchmaros & Kenny, 2001	HW1: Correlation and Simple Regression
W	2/17	Mediation in SPSS / JASP	Etcheverry et al. (2013)	
TR	2/18	Lab 4: Mediation in SPSS / JASP (ZOOM, use 618 148 1171)		
М	2/22	Experimental Designs; Testing Mediation in Experimental Designs	Stangor, Chapters 10, 12	HW2: Multiple Regression
W	2/24	Multiple Mediators, Moderation, Factorial Designs	Stangor Chapter 11; Anderson et al. (2015)	
TR	2/25	Lab 5: Multiple Mediators in SPSS / JASP		

## Course Schedule (cont.)

Note. All M/W classes are on Zoom using meeting ID 918 009 6949. All TR labs are asynchronous (i.e., independent activities) except for those indicated as Zoom.

		Topic	Assigned Reading (by start of class)	Submission (due by start of class)
М	3/1	Testing Continuous X Continuous Interactions in SPSS / JASP		HW3: Mediation Analysis
W	3/3	Review for Midterm Exam		Quiz 2
TR	3/4	Lab 6: Continuous X Continuous Interactions in SPSS / JASP (ZOOM, use 618 148 1171)		
М	3/8	Midterm Exam (No Zoom Meeting)		
W	3/10	Testing Continuous X Categorical Interactions in SPSS / JASP	Stangor, Chapter 2	
TR	3/11	Lab 7: Continuous X Categorical Interactions in SPSS / JASP (ZOOM, use 618 148 1171)	McGuire (1997)	
М	3/15	SPRING BREAK		
W	3/17	SPRING BREAK		
TR	3/18	SPRING BREAK		
М	3/22	Developing Hypotheses; Perceived Responsiveness, Trust, and Social Support	Reis & Gable (2015)	HW4: Submit Article Review 1
W	3/24	Perfectionism and Expectations	Stoeber (2012); Lemay & Venaglia (2016)	HW5: Submit Article Review 2
TR	3/25	Lab 8: Hack Your Brain		
М	3/29	Interpersonal Motivations	Mills et al. (2004); Crocker & Canevello (2012)	HW6: Submit Article Review 3
W	3/31	Reliability	Stangor, Chapter 5	HW7: Submit Hypothesis Ideas
TR	4/1	Lab 9: Consultation on Hypotheses (ZOOM, use 918 009 6949)		

## Course Schedule (cont.)

Note. All M/W classes are on Zoom using meeting ID 918 009 6949. All TR labs are asynchronous (i.e., independent activities) except for those indicated as Zoom.

		Topic	Assigned Reading (by start of class)	Submission (due by start of class)
М	4/5	Validity; Writing Research Proposal	Robins et al. (2001); Stangor, Appendix A	Quiz 3
W	4/7	Event / Experience Sampling Methods; Longitudinal Methods	Crocker et al. (2002); Seder & Oishi (2011)	HW8: Moderation Analysis
TR	4/8	Lab 10: Recode, Compute, and Cronbach's Alpha		
М	4/12	Behavioral Observation Methods; Reproducibility; External Validity	Fraley & Shaver (1998); Stangor, Chapter 7 & 13	Research Proposal Due
W	4/14	Designing Questionnaire Measures	Stangor, Chapter 4	HW9: Questionnaire Critique
TR	4/15	Lab 11: Analysis of Behavioral Observation Data		
М	4/19	Qualitative Methods and Content Analysis; Giving Oral Presentations	Baumeister et al. (1993)	HW10: Content Analysis
W	4/21	Implicit and Priming Methods;	McConnell & Leibold (2001); Caprariello & Reis (2010)	HW11: Measure Construction and Validation
TR	4/22	Lab 12: Research Project Data Analysis Consultation		
М	4/26	Dyadic Data Analysis	Erol & Orth (2013)	HW12: Take an IAT
W	4/28	Project 1 Oral Presentations Day 1		Upload PowerPoint by 10 AM
TR	4/29	Lab 13: Dyadic Data Analysis		HW13: Survey Responses Due
М	5/3	Project 1 Oral Presentations Day 2		
W	5/5	Project 1 Oral Presentations Day 3		Upload Research Poster
TR	5/6	Lab 14: Poster Session (ZOOM, use 918 009 6949)		
M	5/10	Presentation of Content Analysis and Novel Class Data; Writing Research Report		Quiz 4
Т	5/11			Research Report Due

# Recommended (Optional) Readings

		Topic	Recommended Reading (ideally by start of class)
М	1/25	Course Overview	
W	1/27	Scientific Method; Types of Designs; Descriptive and Correlational Designs	
TR	1/28	Lab 1: Completing Content Analysis Questionnaire; Literature Searching; Overview of Meta-Analysis	
M	2/1	Descriptive Statistics, Correlation and Simple Regression in SPSS / JASP; Continuous and Dichotomous Predictors	
W	2/3	Relationship Quality	Wieselquist et al. (1999)
TR	2/4	Lab 2: Descriptive Statistics, Correlation and Simple Regression in SPSS / JASP	
М	2/8	Multiple Regression in SPSS / JASP	
W	2/10	Attachment Insecurity and Self-Esteem	Denissen et al. (2008)
TR	2/11	Lab 3: Multiple Regression in SPSS / JASP	
М	2/15	Statistical Mediation	
W	2/17	Mediation in SPSS / JASP	Sadikaj et al. (2015)
TR	2/18	Lab 4: Mediation in SPSS / JASP	
М	2/22	Experimental Designs; Testing Mediation in Experimental Designs	
W	2/24	Interactions / Moderation	Murphy et al. (2007); Davis et al. (2016)
TR	2/25	Lab 5: Mediation in Experimental Designs	

# Recommended (Optional) Readings

		Topic	Recommended Reading (ideally by start of class)
М	3/1	Testing Continuous X Continuous Interactions in SPSS / JASP	
W	3/3	Review for Midterm Exam	
TR	3/4	Lab 6: Continuous X Continuous Interactions in SPSS / JASP	
М	3/8	Midterm Exam	
W	3/10	Testing Continuous X Categorical Interactions in SPSS / JASP	
TR	3/11	Lab 7: Continuous X Categorical Interactions	
М	3/15	SPRING BREAK	
W	3/17	SPRING BREAK	
TR	3/18	SPRING BREAK	
М	3/22	Developing Hypotheses; Perceived Responsiveness, Trust, and Social Support	Lakey & Cohen (2000)
W	3/24	Perfectionism and Expectations	Flett et al. (2001); Mackinnon et al (2012)
TR	3/25	Lab 8: Hack Your Brain	
М	3/29	Interpersonal Motivations	Gable & Impett (2012)
W	3/31	Reliability	Rusbult et al. (1998)
TR	4/1	Lab 9: Consultation on Hypotheses	

# Recommended (Optional) Readings

		Торіс	Recommended Reading (ideally by start of class)
М	4/5	Validity; Writing Research Proposal	Elliot et al. (2006); Leary et al. (2013)
W	4/7	Event / Experience Sampling Methods; Longitudinal Methods	Laurenceau et al. (1998); Ruan et al. (2019)
TR	4/8	Lab 10: Recode, Compute, and Cronbach's Alpha	
M	4/12	Behavioral Observation Methods; Reproducibility; External Validity	Collins & Feeney (2000)
W	4/14	Designing Questionnaire Measures	
TR	4/15	Lab 11: Analysis of Behavioral Observation Data	
М	4/19	Qualitative Methods and Content Analysis; Giving Oral Presentations	Back et al., 2010; Baumeister et al. (1990)
W	4/21	Implicit and Priming Methods;	Gardner et al., 1999; LeBel & Campbell, 2009
TR	4/22	Lab 12: Research Project Data Analysis Consultation	
М	4/26	Dyadic Data Analysis	Maisel & Gable (2009)
W	4/28	Project 1 Oral Presentations Day 1	
TR	4/29	Lab 13: Dyadic Data Analysis	
М	5/3	Project 1 Oral Presentations Day 2	
W	5/5	Project 1 Oral Presentations Day 3	
TR	5/6	Lab 14: Poster Session	
M	5/10	Presentation of Content Analysis and Novel Class Data; Writing Research Report	

# **Image Credits**

age 1	https://pixabay.com/photos/pen-color-write-draw-board-ruler-2569040/
age 1	https://pixabay.com/photos/people-friends-together-happy-4050698/
age 3	https://pixabay.com/illustrations/cog-wheels-gear-wheel-machine-2125178/
age 3	https://pixabay.com/photos/mark-marker-hand-write-516279/
age 4	https://pixabay.com/photos/people-three-portrait-black-3104635/
age 4	https://pixabay.com/illustrations/love-couple-romance-valentine-560783/
age 4	https://pixabay.com/illustrations/goodness-value-worth-trust-440313/
age 4	https://pixabay.com/vectors/guy-man-pictogram-the-figurine-1987283/
age 4	https://pixabay.com/photos/board-school-forward-front-2525247/
age 4	https://pixabay.com/illustrations/masks-persona-duality-polarity-827731/
age 5	https://pixabay.com/illustrations/magnifying-glass-human-head-faces-1607208
age 6	https://pixabay.com/photos/time-clock-hourglass-hour-1817725/
age 6	https://pixabay.com/photos/handshake-hands-laptop-monitor-3382503/
age 7	https://pixabay.com/photos/books-study-literature-learn-stack-2158737/
age 9	https://pixabay.com/photos/laptop-mac-computer-browser-2557615/