

# COMM 3160

## COMMUNICATION RESEARCH METHODS

### AUTUMN 2025

#### Faculty Instructor:

**Prof. Joseph Bayer, PhD** [pronouns: he/him/his] [bayer.66@osu.edu]

Office hours: Tuesdays/Thursdays, 4pm-5pm ET [[Open Slots](#)]

#### Graduate Student Instructors:

**Sebs Lubert** [pronouns: they/them/theirs] [lubert.5@buckeyemail.osu.edu]

- In-Person Labs
  - Mondays, 8:00-9:50am in Journalism Building 342
  - Mondays, 10:05-11:55am in Journalism Building 342
- Office hours: Mondays, 11:30-1:30pm ET or by Appt. [[Zoom Link](#)]

**Brooke Bennington** [pronouns: she/her/they/them] [bennington.56@buckeyemail.osu.edu]

- In-Person Labs
  - Mondays, 12:10-2:00pm in Journalism Building 342
  - Mondays, 2:15-4:05pm in Journalism Building 342
- Office hours: Wednesdays, 10:00-11:00am ET or by Appt. [[Zoom Link](#)]

## Course description

This course provides an overview of quantitative research methods as they apply to communication research. Students will gain an understanding of how to conduct research, as well as hands-on experience with data collection and data analysis. **The lecture portion of the course (3 credits) is delivered asynchronously online, while the lab is delivered in-person on campus (1 credit).**

## Course learning goals and outcomes

At the conclusion of this course, students will be able to ...

1. ...describe research methods used by social scientists.
2. ...propose and evaluate research designs.
3. ...identify appropriate statistical procedures for different research scenarios.
4. ...analyze and interpret quantitative research data using Microsoft Excel and JASP.
5. ...create and administer simple online surveys/experiments using Qualtrics.

## Mode of delivery

This lecture component of the course is asynchronous and is delivered online. The lab component of the course is delivered in hybrid format, with synchronous meetings occurring once per week on Mondays in-person on campus.

## How this course works

- Each week, a new module will become available on the course Carmen site that contains all of the online requirements associated with that week. Each module will include a series of lecture videos pertaining to key course concepts, as well as instructions for completing the weekly readings and activities due that week.
- Lecture videos are posted to YouTube, and links to each required video are posted to the associated weekly module on Carmen. Closed captioning is available for these videos.
- Each Monday, you will participate in a live (i.e., synchronous) lab session taught by a graduate student instructor (see above for contact information). The lab session will review key course concepts, provide an overview of all course assignments, and offer help conducting data analyses using Microsoft Excel and JASP.
- Asynchronous assignments are due 11:59pm on Sundays (end of module week).

## Course materials

- **The textbook associated with the course is:** Boyle, M. & Schmierbach, M. (2019). *Applied Communication Research Methods: Getting Started as a Researcher* (2<sup>nd</sup> Edition). New York: Routledge. [\[Publisher Link\]](#)
  - You can access the textbook online for **FREE** via the OSU library: [\[Library Link\]](#)
  - The 1<sup>st</sup> Edition is also acceptable for the course.
- Access to a computer/laptop, a high-speed Internet connection, current web browser with video-related plugins, speakers/headphones, Microsoft Excel (available via [this external URL](#)), JASP (available via [this external URL](#)), Qualtrics (available [via this external URL](#)), and TopHat (available via [this external URL](#)). These software programs are all **FREE** to OSU students.
  - Students with accessibility needs should speak directly to me about using JASP. Depending on your needs, we might need to identify an alternative program for you to use or alternative assignments for you to complete.

## Grading

This class has 100 possible points, which are distributed as follows:

|                    |                         |
|--------------------|-------------------------|
| Checkpoints (x5)   | 10 points               |
| Lab Quizzes (x5)   | 50 points               |
| Lab Proposals (x3) | 15 points               |
| Lab Analyses (x3)  | 15 points               |
| Lab Participation  | 10 points               |
| IRB Certification  | 2 points (Extra Credit) |

## Assignments

- **Checkpoints (2pts x5).** Periodic “checkpoints” serve to assess your understanding of key course concepts. Each checkpoint consists of open-ended questions on Carmen. You will receive instructor feedback on these assignments. There are five checkpoints in total, each worth up to 2 points (2 = satisfactory, 1 = needs improvement, 0 = incomplete).
- **Lab Quizzes (10pts x5).** Students have the opportunity to take six quizzes during the semester in-person in lab. Quizzes will assess your knowledge and understanding related to (1) lecture video material and (2) course readings. Quizzes are **not** cumulative.
  - Each quiz is worth 10 points and has 10 questions. The quizzes will rigorously test your knowledge about the topics covered in the previous weekly modules. The quiz difficulty will motivate you to keep up with the material each week and to study as you would for a standard, in-person exam.
  - **Your lowest quiz score will be dropped.** In other words, only your five highest quiz scores will count toward your final grade.
  - Students will only have one 30-minute attempt to complete each quiz. I do not allow group work on the quizzes and doing so constitutes academic misconduct. Please prepare well and do not wait until the last minute to start a quiz, as technological issues can occur (see technology policy below for more details).
- **Lab Proposals (5pts x3).** You will write three research proposals focused on research methods taught in lecture and lab. You are encouraged to be creative with these proposals. Lab instructors will provide more details and guidelines about these proposals.
- **Lab Analyses (5pts x3).** You will complete three sets of statistical analyses that employ skills using Microsoft Excel and JASP. These programs and procedures will be modeled during lecture and lab. Lab instructors will provide more details and guidelines about these analyses.
- **Lab Participation (1pt x10).** A participation grade will be assigned by your lab instructors at the end of the course based on your active participation in the weekly lab activities. There will be one TopHat activity for each weekly lab session. You will receive 1 point for completing each activity during lab. Prior to your first lab meeting, you should create a TopHat account. For assistance using Tophat, visit [this link](#).
- **IRB Certification (2pts Extra Credit).** You have the option to complete human subjects IRB training for extra credit by the end of the semester. This training certifies you to conduct research at OSU and consists of 17 modules that take 10-30 minutes each. Make sure to complete the Social and Behavioral course (not the Biomedical one). Each module has an associated quiz. You must pass these quizzes with an average score of 80% in order to earn your certification. You can re-take the quizzes as many times as needed. Handing in your certification to your lab instructor will 2 points. More details are available [via this external link](#).

## Late assignments

Assume that all deadlines are in Eastern Time (ET). Students may submit all assessments late with a penalty. Penalties for late work increase cumulatively (within one day = -5%; within one week = -10%; within one month = -25%; over one month = -50%).

## Grading scale

Please note that Carmen Canvas, OSU's grading and class management software, does not round fractions up. Please take that into account in computing grades. I do not manually round up grades. The official grading scale is as follows:

93 – 100: A  
 90 – 92.9: A-  
 87 – 89.9: B+  
 83 – 86.9: B  
 80 – 82.9: B-  
 77 – 79.9: C+  
 73 – 76.9: C  
 70 – 72.9: C-  
 67 – 69.9: D+  
 60 – 66.9: D  
 Below 60: E

## Credit hour and work expectation

The lecture component corresponds to a 3-credit-hour course, while the lab component represents a 1-credit-hour course. According to Ohio State policy, students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

## Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

### Grading and feedback

For large weekly assignments, you can generally expect feedback within **7-14 days**.

### E-mail

Prof. Bayer will typically attempt to reply to e-mails within **24 hours on school days**.

### Virtual office hours

Virtual office hours will be held through Ohio State's conferencing platform, Carmen Zoom. Dr. Bayer's digital meeting room can be accessed by the link provided on Page 1. Students may use the

audio and video functions if a webcam and microphone are available. If not, there is still a chat function within Zoom for the student to live chat with the professor in the virtual office hours room. A guide to accessing Zoom is available [online here \(Links to an external site.\)](#) and students can [access support for Carmen Zoom here \(Links to an external site.\)](#).

### Common issues to avoid...

- **Carmen mail/messenger + submission comments.** These are unreliable forms of communication, and the instructors will not check them regularly.
- **Weekend + evening emails.** Under most circumstances, we will respond to messages of this sort on the next business day.
- **Sending emails NOT from your OSU email.** Messages to our OSU accounts from non-OSU email services are regularly marked as spam and since their OSU cannot confirm their delivery, you may not use them as evidence of communication attempts.
- **Unprofessional emails.** Please ensure that your email messages are professional and informative by including your course info in the subject line, a salutation, adequate yet concise body text, closing, and your full name.
- **Emails that require immediate attention.** We aim to answer emails with 24 hours of receipt on business days. Be proactive and plan ahead.

## Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://slts.osu.edu/resnet/help-and-support>, and support for urgent issues is available 24x7.

- **Carmen:**
  - Carmen, Ohio State's Learning Management System, will be used to host materials and activities throughout this course. To access Carmen, visit [Carmen.osu.edu](https://carmen.osu.edu). Log in to Carmen using your name.# and password. If you have not setup a name.# and password, visit [my.osu.edu](https://my.osu.edu).
  - Help guides on the use of Carmen can be found at <https://resourcecenter.odde.osu.edu/carmen>
  - **This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.**
    - [Carmen accessibility](#)
- **Turnitin:**
  - Students at The Ohio State University are accountable for the integrity of the work they submit. Therefore, you should be familiar with the guidelines provided by [Section A of OSU's Code of Student Conduct](#) in order to meet the academic expectations concerning appropriate documentation of sources. In addition, OSU has made Turnitin, a learning tool and plagiarism prevention system, available to instructors. For this class, you will submit your papers to Turnitin from Carmen.

When grading your work, I will interpret the originality report, following [Section A of OSU's Code of Student Conduct](#) as appropriate. For more information about Turnitin, please see [the vendor's guide for students](#). Note that submitted final papers become part of the OSU database.

- **Self-Service and Chat support:** <https://slts.osu.edu/resnet/help-and-support>
- **Phone:** 614-688-HELP (4357)
- **Email:** [8help@osu.edu](mailto:8help@osu.edu)
- **TDD:** 614-688-8743

### **Baseline technical skills necessary for online courses**

- Basic computer and web-browsing skills
- Navigating Carmen

### **Necessary equipment**

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Web cam and microphone

### **Necessary software**

- Word processor with the ability to save files under .doc, .docx, .rtf, or .pdf. Most popular word processing software programs including Microsoft Word and Mac Pages have these abilities.
- OSU students have access to Microsoft Office products free of charge. To install, please visit [https://osuitsm.service-now.com/selfservice/kb\\_view.do?sysparm\\_article=kb04733](https://osuitsm.service-now.com/selfservice/kb_view.do?sysparm_article=kb04733)

## **University policies**

This course is subject to the standard classroom and course policies of all OSU classes. To learn more, please visit: <https://ugeducation.osu.edu/academics/syllabus-policies-statements/standard-syllabus-statements>

## COURSE SCHEDULE [Subject to Change]

### PART I: Foundations of Research Methods

| Modules<br>[Start]<br>[End]         | Weekly Topics  | Assignments<br>(due Sundays<br>@ 11:59pm)   |
|-------------------------------------|--|---|
| <b>Week 1</b><br>Aug 26<br>Aug 31   | <b>Introduction to Research Methods</b> <ul style="list-style-type: none"> <li>• <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 1: Principles of Research (pg. 3-11)</li> <li>○ Ch. 2: Concepts of Research (pg. 13-35)</li> <li>○ Ch. 3: Scholarly Research (pg. 41-72)</li> </ul> </li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Theories and Hypotheses (14 mins)</li> </ul> </li> <li>• <b>No Lab Monday (semester begins Tuesday)</b></li> </ul> | Checkpoint #1                               |
| <b>Week 2</b><br>Sept 1<br>Sept 7   | <b>Concepts and Measurement</b> <ul style="list-style-type: none"> <li>• <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 5: Concept Explication (pg. 101-115)</li> <li>○ Ch. 6: Reliability &amp; Validity (pg. 123-145)</li> </ul> </li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Concepts and Measures (18 mins)</li> <li>○ Intro to Survey Questions (10 mins)</li> </ul> </li> <li>• <b>No Lab Monday (Labor Day)</b></li> </ul>                   |   |
| <b>Week 3</b><br>Sept 8<br>Sept 14  | <b>Special Topic: Physiological Measures</b> <ul style="list-style-type: none"> <li>• No Textbook Readings</li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Psychophysiological Measures (11 mins)</li> </ul> </li> <li>• Monday Lab: Intro to Quizzes</li> </ul>   | <b>Lab Quiz #1</b><br>[Covers Weeks<br>1/2] |
| <b>Week 4</b><br>Sept 15<br>Sept 21 | <b>Introduction to Data Analysis</b> <ul style="list-style-type: none"> <li>• <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 14: Descriptive Statistics (pg. 359-379)</li> </ul> </li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ From Survey to Data (17 mins)</li> <li>○ Data Reduction (14 mins)</li> <li>○ Descriptive Statistics (17 mins)</li> <li>○ Calculating Descriptive Statistics (25 mins)</li> </ul> </li> </ul>                          | Lab Analysis #1                             |

|                                     |   |                 |
|-------------------------------------|---|-----------------|
|                                     | <ul style="list-style-type: none"> <li>Monday Lab: Analysis Workshop</li> </ul>   |                 |
| <b>Week 5</b><br>Sept 22<br>Sept 28 | <b>Sampling and Generalizability</b> <ul style="list-style-type: none"> <li><u>Textbook Readings</u> <ul style="list-style-type: none"> <li>Ch. 8: Sampling (pg. 187-215)</li> </ul> </li> <li><u>Lecture Videos</u> <ul style="list-style-type: none"> <li>Introduction to Sampling (13 mins)</li> <li>Types of Sampling (13 mins)</li> </ul> </li> <li>Monday Lab: Proposal Workshop</li> </ul> | Lab Proposal #1 |

## PART II: Designing Correlational Studies

| Modules<br>[Start]<br>[End]       | Weekly Topics  | Assignments<br>(due Sundays<br>@ 11:59pm)         |
|-----------------------------------|--|---|
| <b>Week 6</b><br>Sept 29<br>Oct 5 | <b>Surveys and Self-Reports</b> <ul style="list-style-type: none"> <li><u>Textbook Readings</u> <ul style="list-style-type: none"> <li>Ch. 7: Effective Measurement (pg. 153-179)</li> </ul> </li> <li><u>Lecture Videos</u> <ul style="list-style-type: none"> <li>Survey Construction (15 mins)</li> <li>Survey Recommendations (16 mins)</li> </ul> </li> <li>Monday Lab: Intro to JASP</li> </ul>  | <b>Lab Quiz #2</b><br><b>[Covers Weeks 3/4/5]</b> |
| <b>Week 7</b><br>Oct 6<br>Oct 12  | <b>Interpreting Survey Results</b> <ul style="list-style-type: none"> <li><u>Textbook Readings</u> <ul style="list-style-type: none"> <li>Ch. 15: Inferential Statistics (pg. 387-417)</li> </ul> </li> <li><u>Lecture Videos</u> <ul style="list-style-type: none"> <li>Correlations (11 mins)</li> <li>NHST (19 mins)</li> <li>Mean Differences (17 mins)</li> <li>Effect Sizes (16 mins)</li> </ul> </li> <li>Monday Lab: Review Day</li> </ul> | Checkpoint #2                                     |
| <b>Week 8</b><br>Oct 13<br>Oct 19 | <b>Data Analysis for Surveys</b> <ul style="list-style-type: none"> <li>No Textbook Readings</li> <li><u>Lecture Videos</u> <ul style="list-style-type: none"> <li>Introduction to JASP (4 mins)</li> </ul> </li> </ul>  | <b>Lab Quiz #3</b><br><b>[Covers Weeks 6/7]</b>   |



|                                   |   |                 |
|-----------------------------------|---|-----------------|
|                                   | <ul style="list-style-type: none"> <li>○ Selecting Analyses for Surveys (16 mins)</li> <li>○ Interpreting Survey Results (18 mins)</li> <li>○ Conducting a Correlation Test (14 mins)</li> <li>○ Conducting a Paired T-Test (10 mins)</li> <li>• Monday Lab: Analysis Workshop</li> </ul>   | Lab Analysis #2 |
| <b>Week 9</b><br>Oct 20<br>Oct 26 | <b>Special Topic: Real-World Surveys</b> <ul style="list-style-type: none"> <li>• <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 10: Survey Research (pg. 261-279)</li> </ul> </li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Real-World Surveys (20 mins)</li> <li>○ The Many Names of Mobile Surveys (3 mins)</li> <li>○ Starting an Experience Sampling Study (3 mins)</li> </ul> </li> <li>• Monday Lab: Proposal Workshop</li> </ul> | Lab Proposal #2 |
| <b>Week 10</b><br>Oct 27<br>Nov 2 | <b>Confounds and Controls</b> <ul style="list-style-type: none"> <li>• <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 16: Multivariate Statistics (pg. 427-433)</li> </ul> </li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Confounds and Study Designs (26 mins)</li> </ul> </li> <li>• Monday Lab: Review Day</li> </ul>   | Checkpoint #3   |

## PART III: Designing Experimental Studies

| Modules<br>[Start]<br>[End]        | Weekly Topics   | Assignments<br>(due Sundays<br>@ 11:59pm)          |
|------------------------------------|---|--|
| <b>Week 11</b><br>Nov 3<br>Nov 9   | <b>Designing Survey Experiments</b> <ul style="list-style-type: none"> <li>• No Textbook Readings</li> <li>• <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Survey Experiments (16 mins)</li> </ul> </li> <li>• Monday Lab: Review Day</li> </ul> | <b>Lab Quiz #4</b><br><b>[Covers Weeks 8/9/10]</b> |
| <b>Week 12</b><br>Nov 10<br>Nov 16 | <b>Laboratory Experiments &amp; Causality</b> <ul style="list-style-type: none"> <li>• <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 9: Experiments (pg. 223-252)</li> </ul> </li> <li>• <u>Lecture Videos</u></li> </ul>                 | Checkpoint #4                                      |

|                                    |  |   |
|------------------------------------|--|---|
|                                    | <ul style="list-style-type: none"> <li>○ Lab Experiments (18 mins)</li> <li>○ Between vs. Within-Subjects Designs (14 mins)</li> <li>○ Limitations to Lab Experiments (21 mins)</li> <li>● Monday Lab: Review Day</li> </ul>   |   |
| <b>Week 13</b><br>Nov 17<br>Nov 23 | <b>Data Analysis for Experiments</b> <ul style="list-style-type: none"> <li>● <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 16: Multivariate Inferential Statistics (pg. 433 - 439)</li> </ul> </li> <li>● <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Selecting Analyses for Experiments (9 mins)</li> <li>○ Interpreting Experimental Results (21 mins)</li> <li>○ Conducting an Independent T-Test (9 mins)</li> <li>○ Conducting an ANOVA (16 mins)</li> </ul> </li> <li>● Monday Lab: Analysis Workshop</li> </ul> | <b>Lab Quiz #5</b><br><b>[Covers Weeks 11/12]</b><br><br>Lab Analysis #3  |
| <b>Week 14</b><br>Nov 24<br>Nov 30 | <b>Thanksgiving Break</b> <ul style="list-style-type: none"> <li>● No Textbook Readings</li> <li>● No Lecture Videos</li> <li>● <b>No Lab Monday (Thanksgiving Break)</b></li> </ul>   | IRB<br>Certification<br>[Extra Credit]                                    |
| <b>Week 15</b><br>Dec 1<br>Dec 7   | <b>Special Topic: Natural &amp; Field Experiments</b> <ul style="list-style-type: none"> <li>● <u>Textbook Readings</u> <ul style="list-style-type: none"> <li>○ Ch. 4: Ethical Research (pg. 81-94)</li> </ul> </li> <li>● <u>Lecture Videos</u> <ul style="list-style-type: none"> <li>○ Natural &amp; Field Experiments (15 mins)</li> </ul> </li> <li>● Monday Lab: Proposal Workshop</li> </ul>   | Lab Proposal #3   |
| <b>Week 16</b><br>Dec 8<br>Dec 14  | <b>Conclusions and Takeaways</b> <ul style="list-style-type: none"> <li>● No Textbook Readings</li> <li>● No Lecture Videos</li> <li>● Monday Lab: Final Assignments</li> </ul>  | <b>Lab Quiz #6</b><br><b>[Covers Weeks 13/14/15]</b><br><br>Checkpoint #5 |