

SOCI 3220: QUANTITATIVE DATA COLLECTION

Fall 2026 • University of North Texas • Department of Sociology

Applied Survey Research & Quantitative Reasoning

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Office Hours	Monday & Wednesday, 12:30–1:30 PM; and by appointment
Section / Meeting	SOCI 3220-001 • Monday and Wednesday, 11:10 AM–12:30 PM
Classroom / Format	GAB 550 • In-person except Week 1 (Aug. 17 & 19: online only via Canvas)
Canvas	Announcements, readings, videos, exams, assignments, feedback, and grades

Course design in one sentence: learn the full logic of quantitative survey research through a small number of meaningful assignments, two take-home open-book Canvas midterms, and active in-class research practice.

Course Overview

SOCI 3220 introduces the principles and procedures of quantitative data collection, with particular attention to survey research, measurement, sampling, and the interpretation of quantitative evidence. The course is designed to prepare students to make sound research-design decisions and to evaluate quantitative claims encountered in scholarly research, public reports, news, and everyday life.

Across the semester, you will design a feasible quantitative survey study. You are not required to collect original human-subject data. Do not recruit participants or administer a survey for this course unless the instructor explicitly authorizes the activity and all applicable ethical and institutional requirements have been satisfied.

This course uses one primary text and two supplemental texts. Nardi provides the quantitative-survey spine of the course; specific page ranges from Seçkin and Orcher (SO) add practical guidance on topic development, literature synthesis, ethics, research questions and hypotheses, measurement, questionnaire construction, demographics, and participant selection. Verdugo (V) provides brief published-research cases that allow students to evaluate real methodological problems, solutions, and tradeoffs. Exact SO pages and Verdugo cases are listed in the weekly schedule.

Learning Outcomes

- Explain how systematic social-scientific inquiry differs from everyday reasoning, anecdotal evidence, and pseudoscientific claims.
- Develop a focused, feasible quantitative research question and appropriate hypotheses.
- Distinguish concepts, variables, values, and levels of measurement and translate abstract concepts into measurable indicators.
- Evaluate measurement quality using reliability, validity, operational definitions, and appropriate scales or indexes.
- Design and critique survey questions, response options, questionnaire organization, sensitive items, and pilot-testing procedures.
- Compare probability and nonprobability sampling strategies and justify a sampling plan for a defined target population.
- Recognize ethical issues in survey research, including consent, privacy, confidentiality, sensitive questions, and responsible reporting.
- Read and interpret basic quantitative evidence, including frequencies, graphs, cross-tabulations, measures of association, group comparisons, and introductory multivariate results.
- Connect research questions, measurement, and sampling decisions to an appropriate analysis plan without overstating causality or generalizability.
- Communicate a coherent quantitative research design in clear written, visual, and oral forms.

Course Materials

Primary text

- Nardi, P.M. & Seçkin, G. (Forthcoming). *Doing Survey Research: A Guide to Quantitative Methods*. 4th ed. Routledge. (NS).

Supplemental texts

- Seçkin, G., & Orcher, L. (2025). *Conducting Research: Social and Behavioral Science Methods*. 3rd ed. Routledge. The exact required page ranges are listed in the course schedule. (SO)
- Verdugo, E. D. 1998. *Practical Problems in Research Methods: A Casebook with Questions for Discussion*. Pyczak Publishing. (V)

Additional short examples, articles, codebooks, polls, datasets, slides, and instructor video modules may be posted in Canvas. Additional readings from textbooks may be required.

How the Course Works

The course is structured to concentrate effort in class and to keep the number of graded submissions manageable. Week 1 (August 17 and 19) is fully online through Canvas, with no in-person meetings. A typical week after Week 1 includes:

- **Prepare:** Complete the assigned Nardi reading and, when listed, the assigned SO pages and Verdugo case(s); watch a short lecture/video when posted.
- **Engage:** Work with a real poll, research claim, survey item, graph, or study excerpt in an applied research activity.
- **Practice:** Complete a short in-class research-design task: refining a question, operationalizing a concept, repairing survey items, evaluating a sample, or interpreting evidence.
- **Build:** Apply that week's skill to your semester survey project during class time.
- **Peer-check:** Give and receive focused feedback in pairs or small groups before leaving class.

Most course activities are formative rather than separately graded. They are designed to help you produce stronger major assignments and a stronger final proposal without turning every class meeting into another homework submission.

Course Participation (10%)

Participation is broader than speaking in front of the whole class. Credit may be earned through in-class polls, small-group problem solving, peer review, short design exercises, brief exit checks, and the end-of-semester one-slide research showcase.

- At least 10 designated participation opportunities will be offered; the best 8 will count toward the participation grade.
- Most participation activities are scored for serious completion/engagement rather than for having a perfect answer.
- The built-in two-opportunity cushion means that an occasional absence or off day does not require a make-up. University-authorized absences and documented circumstances beyond that cushion will be handled in accordance with UNT policy.
- Students will often have time to think individually or discuss with a partner/group before being asked to share aloud.

Semester Survey Project

You will carry one feasible sociological survey topic through the semester. Earlier work is intentionally reusable: feedback from the Research Plan and Measurement + Questionnaire Project should be incorporated into the final proposal rather than rewritten from scratch. The final product is a proposed quantitative survey study, not necessarily a completed empirical study.

Possible topic areas include digital platforms and AI; health and medicine; aging and technology; education and inequality; work and organizations; crime, cybersecurity, or online harms; family and relationships; race/ethnicity and inequality; gender; political or civic attitudes; and other sociological topics approved by the instructor.

Assignments and Grading

Component	Weight	What you will do
Research Plan + Mini Literature Review	10%	~2-page research plan: focused question, brief synthesis of 3–4 scholarly sources, tentative IV/DV and hypothesis, and feasibility/ethics check.
Measurement + Questionnaire Project	20%	Variables/hypotheses, operationalization, and a polished 10–12 item survey with rationale.
Midterm I	17.5%	Take-home, open-book Canvas exam; fully auto-scored using multiple-choice, true/false, and matching questions.
Midterm II	17.5%	Take-home, open-book Canvas exam; fully auto-scored using multiple-choice, true/false, and matching questions.
Final Integrated Survey Proposal	25%	5–6 page cumulative proposal plus questionnaire appendix; integrates and revises earlier work.

Component	Weight	What you will do
Course Participation	10%	Completion-based in-class polls, workshops, peer review, design activities, and showcase.
TOTAL	100%	

Final grade scale: A = 90–100%; B = 80–89.9%; C = 70–79.9%; D = 60–69.9%; F = below 60%. Canvas will calculate weighted categories; minor rounding decisions, if any, are made consistently at the end of the term.

Major Assignment Details

Research Plan + Mini Literature Review — 10%

Approximately 2 pages. State a focused quantitative research question, explain briefly why it matters, synthesize 3–4 credible scholarly sources, identify tentative independent and dependent variables, write one appropriate hypothesis when applicable, and note one important feasibility or ethical concern. This assignment is an early research-plan and feasibility check, not a conventional long literature review.

Measurement + Questionnaire Project — 20%

Identify your main concepts and variables, write appropriate hypotheses when applicable, specify operational definitions and levels of measurement, and create a coherent 10–12 item survey instrument. Include a brief rationale explaining key wording, response-category, reliability/validity, and sensitive-question decisions.

Midterm I — 17.5%

A take-home, open-book Canvas exam covering scientific reasoning, research questions, theory, ethics, concepts and variables, measurement, and questionnaire design. Midterm I will be fully auto-scored and will use multiple-choice, true/false, and matching questions, including applied and scenario-based items. The exam will be available Wednesday, October 7, 2026, from 7:00 AM to 11:59 PM Central Time. There will be no in-person class meeting that day. No essay or short-answer component is required.

Midterm II — 17.5%

A take-home, open-book Canvas exam covering sampling and the interpretation of quantitative evidence, including descriptive data, cross-tabulations, measures of association, correlation, and group comparisons. Midterm II will be fully auto-scored and will use multiple-choice, true/false, and matching questions, including applied and scenario-based items. The exam will be available Wednesday, November 18, 2026, from 7:00 AM to 11:59 PM Central Time. There will be no in-person class meeting that day. No essay or short-answer component is required.

Final Integrated Survey Proposal — 25%

Approximately 5–6 pages, not counting references or the questionnaire appendix. Integrate and revise earlier work into one coherent proposal: research question and significance; brief literature/theoretical framing; hypotheses and measurement; target population, sampling, and data-collection strategy; proposed analysis plan; ethics and limitations; and the kinds of conclusions the study could and could not support. Reusing your own earlier course work is expected when it has been revised in response to feedback.

Integration and revision policy: Parts of the final proposal that were evaluated earlier will not be graded again from scratch. The final assessment emphasizes whether earlier feedback was addressed, whether the pieces fit together coherently, and whether the overall design is methodologically sound. This avoids duplicate work for students and repetitive re-grading.

Course Participation — 10%

Participation is based on designated class activities rather than on how often you volunteer in whole-class discussion. The best 8 of at least 10 opportunities count. The final one-slide research showcase is included within this category and is not a separately graded presentation.

Major Due Dates

Assessment	Due	Submit
Research Plan + Mini Literature Review	Sunday, September 13, 11:59 PM CT	Canvas
Measurement + Questionnaire Project	Sunday, October 11, 11:59 PM CT	Canvas
Midterm I	Wednesday, October 7, 7:00 AM–11:59 PM CT	Canvas
Midterm II	Wednesday, November 18, 7:00 AM–11:59 PM CT	Canvas
Final Integrated Survey Proposal	Monday, December 7, 11:59 PM CT	Canvas

Canvas will list participation activity dates and exam information. If a university calendar change or course pacing adjustment requires a change to a major due date, reasonable notice will be provided through Canvas.

Reading Key for the Schedule

- NS = Nardi & Seckin. *Doing Survey Research*.
- SO = Seçkin & Orcher, *Conducting Research: Social and Behavioral Science Methods* (3rd ed.). Only the exact page ranges listed in the schedule are required.
- V = Verdugo, *Practical Problems in Research Methods: A Casebook with Questions for Discussion*. Only the exact cases/pages listed in the schedule are required.

Reading load principle: Nardi is the primary quantitative sequence. SO provides short practical guidance, while Verdugo provides brief applied cases drawn from published research. Supplemental readings are required only when exact SO pages or Verdugo cases are listed in the schedule.

Fall 2026 Course Schedule

UNT full-term classes run August 17–December 11, 2026. This section normally meets Monday and Wednesday. Week 1 (Aug. 17 & 19) is fully online through Canvas; in-person meetings in GAB 550 begin Aug. 24. There is no class Sept. 7 (Labor Day), Oct. 7 (Midterm I), Nov. 18 (Midterm II), or Nov. 23 & 25 (Thanksgiving Break). Dec. 2 is a UNT Pre-Finals Day: class will meet, but no new material will be introduced. There is no separate sit-down final examination. The Final Integrated Survey Proposal is due Monday, Dec. 7, at 11:59 PM CT in Canvas. The schedule may be adjusted with reasonable notice.

Wk	Dates	Readings	Focus	In-class / major work
1	Aug. 17 & 19 ONLINE ONLY	NS Ch. 1; SO: Ch. 1, pp. 5–12 Topics from observation/theory; access; ethics	Why research? Scientific vs. everyday reasoning; pseudoscience; purposes of social research; from observation to a researchable topic.	No in-person meetings. Complete the readings, instructor videos, power point slides, and online applied research activity, .
2	Aug. 24 & 26	NS Ch. 2; SO: Ch. 3, pp. 23–25; Ch. 29, pp. 257–259; V Case 27, p. 33, “Prescreening Adolescents for Stress” Literature synthesis; core research ethics	Finding research ideas; literature searching; theory; feasibility; ethics; narrowing a topic.	Research-question workshop; library/source search; Verdugo ethics case discussion; participation activity.
3	Aug. 31 & Sep. 2	NS Ch. 3; SO: Ch. 5, pp. 45–48 Hypotheses, purposes, and research questions	Concepts, variables, values, independent/dependent variables, and hypotheses.	IV/DV + hypothesis lab; peer check.
4	Sep. 9 only	NS Ch. 3; V Case 11, p. 14, “Defining ‘Physical Abuse’ of Children”; no SO reading	Operationalization; levels of measurement; discrete/continuous variables.	Concept-to-measure workshop; Verdugo operational-definition case. Research Plan + Mini Literature Review due Sept. 13.
5	Sep. 14 & 16	NS Ch. 3; SO: Ch. 8, pp. 67–70; V Case 9, p. 11, “Evaluating an Acculturation Scale” Existing measures; validity; reliability	Reliability, validity, measurement error, scales/indexes, and improving weak measures.	Measurement repair workshop; Verdugo scale-evaluation case; participation activity.
6	Sep. 21 & 23	NS Ch. 4; SO: Ch. 23, pp. 205–206; V Case 16, p. 20, “Controlling the Distribution of a Questionnaire in a Nutrition Study” Questionnaire organization and administration	Survey modes; open/closed questions; question wording; response options; common item problems.	“Bad survey question” repair workshop; questionnaire build; Verdugo questionnaire-procedure case.
7	Sep. 28 & 30	NS Ch. 4; SO: Ch. 22, pp. 199–203; V Case 15, p. 18, “Defining ‘Sex’ in a National Survey” Demographics; sensitive items; pilot testing	Demographics; sensitive questions; questionnaire order/format; online surveys; pilot testing.	Peer review of draft survey; pilot- test planning; historical Verdugo demographic-measurement case critique; participation activity.

Wk	Dates	Readings	Focus	In-class / major work
8	Oct. 5 only	Review materials; no supplemental reading	Midterm I synthesis: scientific reasoning, research questions, theory, ethics, concepts/variables, measurement, and questionnaire design.	Oct. 5: review and project check-in. Oct. 7: no class meeting; take-home Midterm I available in Canvas, 7:00 AM–11:59 PM CT. Questionnaire Project due Oct. 11.
9	Oct. 12 & 14	NS Ch. 5; SO: Ch. 7, pp. 61–64; V Cases 1–2, pp. 2–3, “Sampling Hispanic Adults by Telephone” and “Using a Sample of Convenience” Participant-selection overview	Sampling foundations; target populations; sampling frames; probability vs. nonprobability approaches.	Sampling scenarios; sampling workshop; Verdugo probability/coverage and convenience-sampling cases.
10	Oct. 19 & 21	NS Ch. 5; V Cases 3–4, pp. 4–5, “Using Quota Sampling” and “Using an Incentive to Increase Response Rate”; no SO reading	Random, stratified, systematic, cluster, convenience, purposive, quota, and snowball sampling; sample size and generalization.	Sampling plan workshop; representativeness and response-rate critique using Verdugo cases.
11	Oct. 26 & 28	NS Ch. 6; no SO reading	Describing quantitative data: frequencies, percentages, graphs, mean/median/mode, variability; reading output rather than hand calculation.	Data interpretation studio; participation activity.
12	Nov. 2 & 4	NS Ch. 7; V Case 31, p. 38, “Interpreting Cause-and-Effect: Health Risk Behaviors of Adolescents”; no SO reading	Relationships between variables: cross-tabulations, chi-square, measures of association, correlation; avoiding causal overstatement.	Applied poll/table critique; bivariate interpretation; Verdugo causal-interpretation case.
13	Nov. 9 & 11	NS Ch. 8; V Case 34, p. 41, “Interpreting Differences in Physical Victimization”; no SO reading	Comparing groups: t-tests and ANOVA conceptually; matching questions and measurement to evidence.	Group-comparison interpretation; choose an analysis for your project; Verdugo interpretation case; participation activity.
14	Nov. 16 only	Review materials; no supplemental reading	Midterm II synthesis: sampling, descriptive data, bivariate relationships, correlation, and group comparisons.	Nov. 16: review and analysis-plan check-in. Nov. 18: no class meeting; take-home Midterm II available in Canvas, 7:00 AM–11:59 PM CT.
15	No class Nov. 23 & 25	—	THANKSGIVING BREAK — no classes.	No assignment due.

Wk	Dates	Readings	Focus	In-class / major work
16	Nov. 30 & Dec. 2	Nov. 30: NS Ch. 9 (introductory sections) + NS Ch. 10; SO Ch. 11, pp. 96–101 (optional proposal reference) Dec. 2: no new reading or new course content	Nov. 30: introductory multivariate interpretation and bringing the study together. Dec. 2 (Pre-Finals Day): synthesis, review, and proposal integration only; no new material.	Nov. 30: multivariate interpretation + proposal integration. Dec. 2: one-slide Research Showcase (participation), course synthesis, and final proposal workshop.
Finals	No class Final proposal due Dec. 7	—	No separate sit-down final examination. The Final Integrated Survey Proposal is the cumulative final assessment.	Final proposal due Monday, Dec. 7, 11:59 PM CT in Canvas. No in-person final-exam meeting.

Course Policies

Attendance and Participation

Regular attendance is strongly expected because many class activities involve collaborative practice, peer feedback, and project-building that cannot be duplicated exactly outside class. Attendance itself is not a separate grade; designated Research Studio participation activities make up 10% of the course grade. The best 8 of at least 10 opportunities count, providing flexibility for occasional absences. University-authorized absences will be handled in accordance with UNT Policy 06.039.

Late and Missed Work

Major assignments and exams are due or must be completed within the dates and times listed in this syllabus and Canvas. If an emergency, university-authorized absence, or other legitimate circumstance may affect a deadline or exam window, contact the instructor as early as reasonably possible. Unless an extension has been approved, major assignments submitted late may lose 5% of the assignment value per calendar day for up to five days. Routine participation activities generally do not require make-ups because at least two participation opportunities are dropped. Midterm make-ups require an approved arrangement based on a legitimate circumstance.

Feedback and Revision

There is no separate resubmission requirement for earlier major assignments. Instead, use instructor and peer feedback to revise those components when you integrate them into the Final Survey Proposal. This approach is intended to reward improvement while avoiding repetitive submission and regrading.

Responsible Use of Generative AI

All submitted work must reflect your own learning and research-methods reasoning. When an assignment permits it, generative AI may be used as a support tool, not as a substitute for the required reading, thinking, or interpretation.

- Usually allowed: brainstorming possible research questions; generating alternative survey wording that you then evaluate; asking for explanations of concepts; improving organization or clarity of your own draft; and checking whether a survey item may contain common wording problems.
- Not allowed unless explicitly authorized: completing Midterm I or Midterm II with generative AI; generating an entire assignment for submission as your own; fabricating citations, sources, survey responses, participants, data, analyses, or results; or inventing evidence.
- Disclosure: if AI contributed substantively to a major assignment, include a brief 1–2 sentence note identifying the tool and describing how it was used. You remain responsible for accuracy, sources, wording, and methodological quality.

Academic Integrity

UNT Policy 06.003 defines academic dishonesty to include conduct such as cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. In a research-methods course, fabrication of sources, survey responses, data, analyses, or results is especially serious. Depending on the nature and severity of a violation, consequences may include a zero on the affected work and referral through university academic-integrity procedures.

Incomplete Grades

An Incomplete is considered only when a student has made substantial satisfactory progress in the course and an extenuating circumstance near the end of the term prevents completion. Requests are handled in accordance with university policy and require an agreed plan for completion.

Communication and Canvas

Check Canvas and your UNT EagleConnect email regularly. Canvas is the authoritative location for modules, assignment prompts, exam windows, feedback, and any approved schedule adjustments. When emailing about the course, include SOCI 3220 in the subject line.

UNT Required Statements and Student Resources

Disability Accommodation

The University of North Texas makes reasonable accommodation for students with disabilities. Students needing reasonable academic accommodations must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the student will request a letter of accommodation. ODA will provide faculty with a reasonable accommodation letter via email to begin a private discussion regarding the student's specific needs in the course. Students may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid delay in implementation. Students must obtain a new letter of reasonable accommodation each semester and meet with each faculty member prior to implementation in each class. Students are strongly encouraged to discuss accommodations during office hours or by appointment. For additional information, contact the Office of Disability Access at disability@unt.edu or 940-565-4323, or visit the ODA website.

Emergency Notification and Procedures

UNT uses Eagle Alert for critical information about severe weather, campus closures, health and public-safety emergencies, and other urgent situations. If a class cannot meet, consult Canvas for the course contingency plan.

Additional UNT Resources

Students are expected to support a learning environment in which everyone can participate. UNT conduct expectations apply to in-person and electronic course spaces. Official communication is delivered through UNT systems, including EagleConnect; course records are handled in accordance with university records policies and FERPA. UNT administers SPOT course evaluations during the later weeks of long semesters.

Syllabus Changes

This syllabus is a good-faith plan for the semester. Reasonable changes may be made for instructional needs, university calendar changes, emergencies, or the pace of the class. Students will receive reasonable notice through Canvas and/or class announcements.

Final Examination / Cumulative Final Assessment

There is no separate sit-down final examination and no in-person final-exam meeting. The Final Integrated Survey Proposal serves as the cumulative final assessment and is due Monday, December 7, 2026, at 11:59 PM Central Time in Canvas.