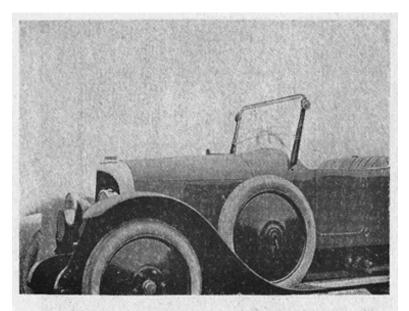
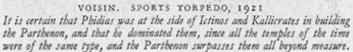
ARCH 5315-00	1 & D01 SYSTEMS OF ARCHITECTURAL INQUIRY .
Class times and location	TUESDAYS and THURSDAYS, 3:30 PM – 4:50 PM. Synchronous Online
Instructor	Prof: Saif Haq , PhD, email: <u>saif.haq@ttu.edu</u> , Office Arch 1008F, Phone: 806-834-6317
Instructor Office Hours:	Tuesdays and Thursdays 12:30 PM to 2:00 PM and by appointment. (If you need to talk to me outside my office hours, feel free to call, email or text. I will do my best to meet with you. Leave message if I am not available. I will respond ASAP)

If changes are made in this syllabus, then it will be announced in class and marked in RED.

1. CATALOGUE DESCRIPTION

5315. Systems of Architectural Inquiry (3) An investigation into the schools of thought and methods of inquiry, including the craft of research with a focus on writing, reading, and critical thinking





Corbusier, L. (1960). <u>Towards a New Architecture (Uers Une</u> <u>Architecture, 1923)</u>. New York, Praeger Publishers Ltd.

3. PRE-REQUISITE

- An inquisitive mind.
- Willingness to think critically and work hard.
- A good knowledge of historical and contemporary architecture.

2. COURSE OVERVIEW

ARCH 5315 provides an overview of numerous research methodologies used in studies of the built environment and their intellectual bases. The class focuses on the individual research/scholarly agendas of enrolled students. Through lectures on selected topics, class discussions, and written papers of several lengths, this class highlights the many faceted possibilities that exist in architectural inquiry and provide a foundation for students to understand their research directions and organize their research interests into specific proposals that might lead to their theses or dissertations.

The course is offered to all incoming students in the M. S. in Architecture and the Ph.D. in Land use, Planning, Management, and Design (LPMD) programs. It is also open to all interested graduate students.

4. EXPECTED LEARNING OUTCOMES AND METHODS OF ASSESSMENT

- Students will become familiar with systems of architectural inquiry and research methods from different scholarly traditions. (Assessed by attendance, papers and participation in class discussions)
- Students will gain exposure to selected masters and doctoral research, including their strengths and weaknesses. (Measured by response paper and class presentations)
- Students will develop their own perspective on a methodological approach that they may pursue in their individual research (Assessed by final paper)

5. ATTENDANCE POLICY

The College of Architecture at Texas Tech University takes the professional preparation of its students as future architects very seriously. Architectural professionals understand the importance of being present, on time, with work completed. Adherence to these professional attributes begins in architectural education. <u>Thus, attendance is</u> <u>mandatory</u>. For a graduate course, "attendance" means more than showing up to class. It means coming to class having read the materials or done the assigned tasks. It also means having assignments submitted when it is due. Please remember that each class builds on the previous one and being absent in class will seriously hinder comprehension of the materials.

A maximum of two absences will be excused. For each <u>unexcused</u> absence after that, 2% will be deducted from the final grade. However, as per college-approved policy, more than five absences (excused or unexcused) will result in a failing grade. In keeping with the same spirit, students who attend all the classes in the semester will be eligible to receive an extra 2% in their final grade.

Each student is expected to attend all lectures and discussions in their entirety. Arriving late to class, working on anything other than class work and departing early can be considered as absences.

Also see,

Texas Tech University Class Attendance Policy in pp. 51 and College of Architecture's attendance policies in pp. 101 of Tech University Graduate and Undergraduate Catalogue 2020-2021, available at https://www.depts.ttu.edu/officialpublications/pdfs/2020_2021_catalog_TTU.pdf

Additionally,

If at any time during this semester you feel ill, in the interest of your own health and safety as well as the health and safety of your instructors and classmates, you are encouraged not to attend face-to-face class meetings or events. Please review the steps outlined below that you should follow to ensure your absence for illness will be excused. These steps also apply to not participating in synchronous online class meetings if you feel too ill to do so and missing specified assignment due dates in asynchronous online classes because of illness.

1. If you are ill and think the symptoms might be COVID-19-related:

a. Call Student Health Services at 806.743.2848 or your health care provider. After hours and on weekends contact TTU COVID-19 Helpline at [TBA].

b. Self-report as soon as possible using the Dean of Students COVID-19 webpage. This website has specific directions about how to upload documentation from a medical provider and what will happen if your illness renders you unable to participate in classes for more than one week.

c. If your illness is determined to be COVID-19-related, all remaining documentation and communication will be handled through the Office of the Dean of Students, including notification of your instructors of the period of time you may be absent from and may return to classes.

d. If your illness is determined not to be COVID-19-related, please follow steps 2.a-d below.

2. If you are ill and can attribute your symptoms to something other than COVID-19:

a. If your illness renders you unable to attend face-to-face classes, participate in synchronous online classes, or miss specified assignment due dates in asynchronous online classes, you are encouraged to visit with either

Student Health Services at 806.743.2848 or your health care provider. Note that Student Health Services and your own and other health care providers may arrange virtual visits.

- b. During the health provider visit, request a "return to school" note;
- c. E-mail the instructor a picture of that note;
- d. Return to class by the next class period after the date indicated on your note.

Following the steps outlined above helps to keep your instructors informed about your absences and ensures your absence or missing an assignment due date because of illness will be marked excused. You will still be responsible to complete within a week of returning to class any assignments, quizzes, or exams you miss because of illness.

3. If you have interacted with individual(s) who have tested positive for COVID-19:

Maintain a list of those persons and consult Student Health Services at 806-743-2911 or your primary care provider on next steps

6. ELECTRONIC MAIL

All students should update their official TTU email accounts and check it every day. Announcements and other information will be sent to this email address. *This will be considered 'official' notification*.

7. CLASS SCHEDULE

Note: If there is a reading assigned, please make sure to read it BEFORE coming to class.

			TOPIC and CONCEPTS	
W1	1	T, AUG 24	INTRODUCTION TO CLASS systematic, research question, research methods, research tools	BEGIN PROJECT-1 : Self-Assessment and Projection <i>IMPORTANT: Think of a 'Research Area' that you are interested</i> <i>in. Discuss with Instructor.</i>
	2	R, AUG 26	WHAT IS RESEARCH? (SS) Research, research question, theory, empirical/scientific research, evidence, critical thinking, logic	BEGIN PROJECT 2: Research and Critical Thinking
W2	3	T-AUG 31	LIBRARY PROTOCOLS FOR RESEARCHERS data base, journal, articles, peer review,	Guest Lecturer: Ms. Hillary Veeder, SUBMISSION PROJECT 1 Self-Assessment and Projection
	4	R, SEPT O2	READING LITERATURE: fast reading techniques, systematic literature review, theoretical development vs empirical verification, systematic literature review, meta-analysis	Sample for Class Discussion: Haq, S., Hill, G., & Pramanik, A. (2005, June). Comparison of Configurational, Wayfinding and Cognitive Correlates in Real and Virtual Settings 5th International Space Syntax Symposium, 13 - 17 June, Delft University of Technology. Readings: <u>Speedy Reading, <i>in The Craft of Research</i>, Second Ed., Booth, Colomb and Williams, ed. University of Chicago Press, 2003, pp. 106-107 "Getting your bearings, what is this paper all about"</u>

				in <u>T. Greenhalagh, (2001) <i>How to Read a Paper</i>, London, BMJ Books</u> Pati, D. (2011). A Framework for Evaluating Evidence in Evidence- Based Design. Health Environments Research & Design, 4(3), 50- 71. BEGIN PROJECT -3 Library Search-Thesis
W3	5	T, SEPT 07	CITING LITERATURE: Citation methods EXAMPLES 1. <u>APA STYLE</u> 2. <u>CHICAGO (Author-Date)</u> 3. <u>CHICAGO (endnote)</u>	Please see <u>https://guides.library.ttu.edu/citation</u> <u>CHICAGO/TURABIAN style Guide</u> SUBMISSION OF PROJECT -2 Research and Critical Thinking
	6	R, SEPT 09	RELATED INTELLECTUAL CONCEPTS	Begin PROJECT-4: Some Relevant Concepts REFERENCE:: <u>http://salmapatel.co.uk/wp-</u> <u>content/uploads/2015/07/research-Paradigm-page0001.jpg</u>
W4	7	T, SEPT 14	DISCUSSION	SUBMISSION Project 3 Library Search-Thesis
	8	R, SEPT 16	DOES DESIGN EQUAL RESEARCH? Difference between design and research	Read: <u>Groat, L., & Wang, D. (2013). "Does Design Equal Research</u> " in <u>Architectural Research Methods: Wiley.</u>
W5	9	T, SEPT 21	DISCUSSION	SUBMISSION Project 4 Some Relevant Concepts Begin PROJECT 5: Response to Thesis/Dissertation
	10	R SEPT 23	INTRODUCTION to QUALITATIVE and QUANTITATIVE THINKING	Readings: Excerpts from: <u>Venturi, 'Complexity and Contradictions in</u> <u>Architecture'</u> Ulrich, R. (1984). A view through a window may influence recovery from surgery. <u>Science</u> , 224(4647), 420-421

W6	11	T, SEPT 28	QUALITATIVE METHODS – 1 (SS)	Readings: Porter, William. <u>"Re:Reading." <i>Places</i>. Issue 12, 3. Cambridge, MA:</u> <u>MIT Press</u>
			Logical argumentation	<u>'Logical Argumentation' (chapter 11), in Groat and Wang,</u> Architectural Research Methods, Wiley
				SUBMISSION PROJECT 5: Response to Thesis/Dissertation
	12	R, SEPT 30	QUALITATIVE METHODS – 2	Readings:
				Deaton, L, (2020), "Freedmen's Town Versus Frenchtown: A Hisotry of Two Black Settlements in Houston, TX' in TDSR, Vol XXXI, 11, 51-69
				Qualitative Research, (Chapter 7), in Groat and Wang, Architectural Research Methods, Wiley
W7	13	T, OCT 05	DISCUSSION	DISCUSSION: Project 5
				Begin PROJECT 6:
				Library Search – Journal Articles
	14	R, OCT 07	QUANTITATIVE METHODS – 1 (SS)	
			data, data types, variables, some statistical concepts	
W8	15	T, OCT 12	QUANTITATIVE METHODS -2	for reference:
				Etchegaray, Jason M, Allison J Ottenbecher, Dean F Sittig, and Allison B McCoy. 2012. "Understanding Evidence Based Research Methods: t-tests, and Odds Ratios." Health Environments Research & Design 6 (1): 143-147.
	16	R, OCT 14	NINE COMPONENTS OF THE RESEARCH PROCESS (SS)	
W9	17	T, OCT 19	SYSTEMS OF INQUIRY and	Readings:
vvə	1/	1,001 19	STANDARDS OF RESEARCH QUALITY	Groat, L., & Wang, D. (2013). Chapter 3, Systems of Inquiry and Standards of Research Quality In Architectural Research Methods: Wiley.
				SUBMISSION PROJECT 6:

				Library Search – Journal Articles
				BEGIN PROJECT 7: Research Proposal
	18	R, OCT 21	SYSTEMS OF INQUIRY AND STANDARDS OF RESEARCH QUALITY (Contd)	Students will discuss their preliminary ideas of proposed research (project 7)
W10	19	T, OCT 26	INDEPENDENT STUDIES	
	20	R, OCT 28	INDEPENDENT STUDIES	
W11	21	T, NOV 02	WHAT IS A DISSERTATION? (SS)	Read before coming to class:_ Haq, S., & Zimring, C. (2003). Just down the road a piece: The development of topological knowledge of Building Layouts Environment and Behavior, 35(1), 132-160.
	22	R, NOV 04	CONCEPTS OF HUMAN- ENVIRONMENT INTERACTIONS	
W12	23	T, NOV 09	SPACE SYNTAX	Haq, S. (2019). Where We Walk Is What We See: Foundational Concepts and Analytical Techniques of Space Syntax. HERD: Health Environments Research & Design Journal, 0(0), 1937586718812436. https://doi.org/10.1177/1937586718812436
	24	R, NOV 11	SPACE SYNTAX (contd)	
W13	25	T, NOV 16	STUDENT PRESENTATIONS	
	26	R, NOV 18	STUDENT PRESENTATIONS	
W14	27	T, NOV 23 NO EXAMS	STUDENT PRESENTATIONS	
		R, NOV 25,		
		THANKSGIVING		
		T, NOV 30 LAST DAY OF CLASS		SUBMISSION PROJECT 7: Research Proposal
		T, DEC 07 4:30 – 7:00 PM		
		Monday, DEC 13,	FINAL GRADES DUE	

8. ACADEMIC INTEGRITY/PLAGIARISM

See 'Academic Integrity' pp.52, TTU Undergraduate and Graduate Catalogue, 2020-2021, available at https://www.depts.ttu.edu/officialpublications/pdfs/2020_2021_catalog_TTU.pdf

9. GRADING POLICY

Grade A: <u>Superior work</u>. Exceptional performance strongly exceeding requirements of assignments; initiative proving independent resourcefulness; strong positive attitude toward the work; a growing level of improvement. *Grade B:* <u>Good, above average</u>. Adequate performance above the norm, accurate and complete, beyond requirements of assignments: good initiative; positive attitude toward the work; improvement showing marks of progress.

Grade C: Average. Mediocre or conservative performance, satisfying all requirements of assignments with a neutral and ordinary level of initiative, attitude, and performance.

Grade D: <u>Not Acceptable</u>. Performance not meeting the passing standards of the course. Initiative unacceptable. Work below standard.

Grade F: <u>*Failing*</u>. Ineffective performance not satisfying the requirements of the assignments to an extreme degree. Level of initiative, attitude, and improvement non-existent.

A student who has shown clear and successful improvement throughout the semester may be given the advantage in final grade.

For the purpose of calculating a final grade the following numbering system will be used: A+ = 97-100, A= 93-96, A- =90-92, B+ = 87-89, B = 83-86, B- = 80-82, C+ = 77-79, C = 73-76, C- = 70-72, D+ = 67-69, D = 63-66, D-=60-62. F=below 60

10. GRADE DISTRIBUTION

- Project 1: Self-Assessment and Projection -5%
- Project 2: Research and Critical Thinking -5%
- Project 3: Library Search (Thesis / Dissertation) -5%
- Project 4 Relevant Concepts -5%
- Project Response to dissertation/thesis -20%
- Project 6 Library Search (Journal Article/Book Chapter) -5%
- Project 7 Research Proposal 45%
- Class presentations -10%

11. READINGS

The instructor in the course of the semester will provide reading materials as required.

12. PROJECTS

NOTE: All papers must be double spaced. This will allow the instructor to provide written comments.

1. PROJECT ONE: Self-Assessment and Projection

Write a short essay about yourself and include the following paragraphs:

• <u>PARAGRAPH 1:</u> <u>Background</u>. IMP: This should be written such that it becomes an introduction to the sections that follow.

- PARAGRAPH 2: What do you want to accomplish at TTU? (Short Term Goals) How will you accomplish this?
- <u>PARAGRAPH 3:</u> What are your long-term goals? Again, how will you accomplish this? How does your background prepare you for this?

Please remember to treat this paper as an academic exercise and think critically about your past experience and how they might help you in TTU and beyond. Be realistic. Can you identify a field within architecture/urban design/environmental design that interests you?

(LEARNING OBJECTIVES: Evaluating information to project future conditions)

2. PROJECT TWO: Research and Critical Thinking

Write a short essay (about one page) on research and critical thinking. Please address the following:

- 1. What is Research? What is Critical Thinking? How are they related?
- 2. What are some ways in which research is understood.
- 3. What is 'scientific' research?
- 4. What are Research tools?
- 5. What are the differences between research and design?

6. What is different about research in the creative fields?

(LEARNING OBJECTIVES: Understanding basic research concepts)

3. PROJECT THREE: Library Search 1 (Thesis/Dissertation)

Think of an area/topic/field that interests you. This will be the research area that you have identified earlier.

Your job is to find two thesis/dissertations that deal with a research question in your identified area. These should fulfill the following criteria.

1. They should be from very distinguished institutions of higher learning.

2. The supervisor should be a recognized expert in the field.

3. They should have results that can be applied to design, i.e. relates physical/architectural components. They should have illustrations, drawings etc.

4. Research methods should be clearly explained (can you do the same research if necessary?) <u>Note</u>: Please be selective about the thesis/dissertations that you choose. Make a shortlist and choose wisely. Consult your instructor

Submission requirements

1. Write: Title, Author, year, Advisor, committee members, Department, University

2. PARAGRAPH-1: Explain how you have done the 'search' and 'retrieval' steps to get the two articles (if you have used different steps for the two items, explain them separately.) Extra credit will be awarded for graphics, i.e drawings, sketches, photos etc.

3. PARAGRAPH-2 and 3: (One paragraph for each thesis/dissertation that you have selected) Write a very short statement explaining why the thesis/dissertation is relevant. What questions are addressed in the research, and what is the outcome.

4. Full text of two thesis/dissertations. Also bring to class for discussion.

(LEARNING OBJECTIVES: Library search and retrieval processes. Understanding the differences between academic and popular publications.)

4. PROJECT FOUR: Some Relevant Concepts

Write short notes to explain and bring out the differences between the paired concepts below.

- 1. Idealism and Rationalism
- 2. Deductive and Inductive Logic
- 3. Qualitative and Quantitative methods
- 4. Positivism and Constructivism
- 5. Paradigm/worldview/ideology
- 6. Ontology and Epistemology
- 7. Internal and External validity
- 8. Data and Variables

(LEARNING OBJECTIVES: Awareness of Intellectual Concepts)

5. PROJECT FIVE: Response to your selected thesis/dissertation

Carefully read the thesis/dissertation that you have selected. <u>Now answer the following questions one by one.</u> <u>Please write the question and then your answer.</u>

1. Introduction. What is the main intention of the researcher? What research questions are being addressed?

2. How does the literature review lead to the research question? Is there a logical progression? What was missed?

3. Is there a specific hypothesis? If so, what is it? (Remember, sometimes this is not explicitly stated. If not, can you develop one?)

4. What research methods were used? Do <u>not</u> try to name them, rather, describe the steps that the researcher has undertaken, in a chronological order. In other words, try to explain this step by step.

- a. What are the variables considered? How were they described and measured?
- b. Can you recreate the research if necessary? Explain.

5. How was the data collected, analyzed and evaluated? Again, do not try to name things but explain in as much detail as you can.

- 6. What would you do if you had to do this again? What would you change to improve the methodology?
- 7. What were the general findings?
- 8. What were the specific findings?
- 9. Look at the bibliography. Can you identify 'classic' authors in this field.
- 10. Create an illustrated abstract of this thesis/dissertation.

The report should be about 2500 words. Use diagrams, images etc to clarify your points

(LEARNING OUTCOMES: Research methodology)

6. PROJECT SIX: Library Search (2 Journal Articles)

Now that you have decided on a general area of research, and a more in-depth interest, your job is to find two related peer-reviewed full text journal papers or book chapters. These should fulfill the following criteria.

1. They should be directly related to your area of research.

- 2. Should be published in well-respected journals.
- 3. They should have results that can be applied to design, i.e. relates physical/architectural components to outcomes.
- 4. They should have illustrations, drawings etc.
- 5. Research methods should be clearly explained. (Can you do the same research if this was necessary?) NOTE: Please be selective about the articles that you choose.

Submission requirements

After you have found/selected your articles, please write three paragraphs about EACH one.

- Paragraph 1: Describe how you have searched, found, and selected the journal articles, i.e. the 'search',
- 'retrieval' and 'selection' steps you have taken to get the two articles.
- Paragraph 2: Explain the research intention, methods and results of the article.
- Paragraph 3: Clarify why the article is relevant to design and how the results can be applied. (Extra credit will be awarded for graphics, i.e drawings, sketches, photos etc.)
- 2 articles / book chapters in pdf format.

(LEARNING OBJECTIVES: Library search and retrieval processes. Understanding the differences between academic and non-academic publications.

7. PROJECT SEVEN: RESEARCH PROPOSAL (Thesis/Dissertation)

Write a research proposal that you might undertake for your eventual theses/dissertation. This should include literature review, research question(s) to be addressed, variables to be used, methods for collecting data, techniques of analysis, and expected results.

This should be illustrated, formatted and a proper citation style used. It should be about 5000 words, including bibliography.

Research Proposal (Adapted from http://libguides.usc.edu/writingguide/researchproposal, accessed 10/31/2017)

A research proposal (1) presents a research problem, (2) explains the methodology that best addresses the problem, and (3) justifies the need of study. It also discusses (4) what might be some findings from the study; i.e anticipated outcomes and/or benefits derived from the study. Some factors to keep in mind:

- a. <u>What do you plan to accomplish?</u> Be clear and succinct in defining the research problem and what it is you are proposing to research.
- b. <u>Why do you want to do it?</u> In addition to detailing your research design, you also must conduct a thorough review of the literature and provide convincing evidence that it is a topic worthy of study. Be sure to answer the "So What?" question.
- c. <u>How are you going to do it?</u> Be sure that what you propose is doable. If you're having trouble formulating a research problem to propose investigating
- d. What will you get out of it?

Sections to be included in the proposal:

a. Proposed title of the thesis/dissertation.

b. Introduction

This is the initial pitch of an idea or a thorough examination of the significance of a research problem. It should describe the central research problem and introduce (a) the topic of study related to that problem and (b) methods used to analyze the research problem. Please succinctly describe the research question here.

Please explain why this research is important, what is its significance, and why should someone should care about the outcomes of the proposed study?

Note: After reading the introduction, your readers should not only have an understanding of what you want to do, but they should also be able to gain a sense of your passion for the topic and be excited about the study's possible outcomes.

c. Background and Significance

This is where you explain the context of your proposal and describe in detail why it's important. Do not assume your readers will know as much about the research problem as you do. You should:

State the research question and give a more detailed explanation about the purpose of the study than what you stated in the introduction. This is particularly important if the problem is complex or multifaceted.

Present the rationale of your proposed study and clearly indicate why it is worth doing. Answer the "So What? question i.e., why should anyone care.

Describe the major issues or problems to be addressed by your research. Be sure to note how your proposed study builds on previous assumptions about the research problem.

Explain how you plan to go about conducting your research. Clearly identify the key sources you intend to use and explain how they will contribute to your analysis of the topic.

Set the boundaries of your proposed research in order to provide a clear focus. Where appropriate, state not only what you will study, but what is excluded from the study.

If necessary, provide definitions of key concepts or terms.

d. Literature Review (What do we know about the topic)

The purpose here is to place your project within the larger whole of what is currently being explored, while demonstrating to your readers that your work is original and innovative. Think about what questions have previous researchers have asked, what methods they have used, and what is your understanding of their findings and, where stated, their recommendations. Do not be afraid to challenge the conclusions of prior research. Assess what

you believe is missing and state how previous research has failed to adequately examine the issue that your study addresses.

Since a literature review is information dense, it is crucial that this section is intelligently structured to enable a reader to grasp the key arguments underpinning your study in relation to that of other researchers. A good strategy is to break the literature into "conceptual categories" [themes] rather than systematically describing groups of materials one at a time. Note that conceptual categories generally reveal themselves after you have read most of the pertinent literature on your topic so adding new categories is an on-going process of discovery as you read more studies.

How do you know you've covered the key conceptual categories underlying the research literature? Generally, you can have confidence that all of the significant conceptual categories have been identified if you start to see repetition in the conclusions or recommendations that are being made.

To help frame your proposal's literature review, here are the "five C's" of writing a literature review:

1. *Cite*, to keep the primary focus on the literature pertinent to your research problem.

2. *Compare* the various arguments, theories, methodologies, and findings expressed in the literature: what do the authors agree on? Who applies similar approaches to analyzing the research problem?

3. **Contrast** the various arguments, themes, methodologies, approaches, and controversies expressed in the literature: what are the major areas of disagreement, controversy, or debate?

4. *Critique* the literature: Which arguments are more persuasive, and why? Which approaches, findings, methodologies seem most reliable, valid, or appropriate, and why? Pay attention to the verbs you use to describe what an author says/does [e.g., asserts, demonstrates, argues, etc.].

5. **Connect** the literature to your own area of research and investigation: how does your own work draw upon, depart from, synthesize, or add a new perspective to what has been said in the literature? The literature review should naturally end in your research question.

Sometimes it is useful to keep track of research methods used by previous researchers. Remember, you will have to develop your own research method and any help that you can get from previous researchers is always helpful.

e. Research Design and Methods (what you will do)

This section must be logically organized because you are not actually doing the research, yet, your reader has to have confidence that it is worth pursuing.

The objective here is to convince the reader that your overall research design and methods of analysis will correctly address the problem and that the methods will provide the means to effectively interpret the potential results.

Describe the overall research design by building upon and drawing examples from your review of the literature. Consider not only methods that other researchers have used but methods of data gathering that have not been used but perhaps could be. Be specific about the methodological approaches you plan to undertake to obtain information, the techniques you would use to analyze the data, and the tests of external validity to which you commit yourself.

When describing the methods you will use, be sure to cover the following:

Keep in mind that a methodology is not just a list of tasks; it is an argument as to why these tasks add up to the best way to investigate the research problem. This is an important point because the mere listing of tasks to be performed does not demonstrate that, collectively, they effectively address the research problem. Be sure you explain this.

Specify the research operations you will undertake and the way you will interpret the results of these operations in relation to the research problem. Don't just describe what you intend to achieve from applying the methods you choose, but state how you will spend your time while applying these methods [e.g., coding text from interviews to

find statements about some area; running a regression to determine if there is a relationship between variables, etc.]

Anticipate and acknowledge any potential barriers and pitfalls in carrying out your research design and explain how you plan to address them. No method is perfect so you need to describe where you believe challenges may exist in obtaining data or accessing information. It's always better to acknowledge this than to have it brought up by your reader.

f. Preliminary Suppositions and Implications (What do you expect to find)

The purpose of this section is to argue how and in what ways you believe your research will refine, revise, or extend existing knowledge in the subject area under investigation. Depending on the aims and objectives of your study, describe how the anticipated results will impact future scholarly research or theory.

When thinking about the potential implications of your study, ask the following questions:

- 1. What might the results mean in regards to the theoretical framework that underpins the study?
- 2. What suggestions for subsequent research could arise from the potential outcomes of the study?
- 3. What will the results mean to practitioners?
- 4. Will the results influence programs, methods, and/or forms of intervention?
- 5. How might the results contribute to the solution of problems?
- 6. In what way do individuals or groups benefit should your study be pursued?
- 7. What will be improved or changed as a result of the proposed research?
- 8. How will the results of the study be implemented, and what innovations will come about?

g. Conclusion

The conclusion reiterates the importance or significance of your proposal and provides a brief summary of the entire study. This section should be only one or two paragraphs long, emphasizing why the research problem is worth investigating, why your research study is unique, and how it should advance existing knowledge. Someone reading this section should come away with an understanding of:

- 1. Why the study should be done,
- 2. The specific purpose of the study and the research questions it attempts to answer,
- 3. The decision to why the research design and methods used where chosen over other options,
- 4. The potential implications emerging from your proposed study of the research problem, and
- 5. A sense of how your study fits within the broader scholarship about the research problem.

h. Citations

As with any scholarly research paper, you must cite the sources you used in composing your proposal. Use any citation style, preferably that uses in line references and a bibliography.

This section should testify to the fact that you did enough preparatory work to make sure the project will complement and not duplicate the efforts of other researchers.

This section normally does not count towards the total page length of your research proposal.

13. GENERAL COMMENTS ABOUT WRITING

You need to organize your thoughts before you start writing. Think about ideas that you will explain and put them in logical sequence so that they make sense. Remember that some ideas are 'nested' within others.

Please make an outline of your papers. Use Microsoft 'headers' and 'sub headers'. After the sequence of ideas are written down in an outline form, the start writing to explain/describe each 'heading' or 'sub heading'.

As you keep writing (and reading), new discoveries may cause you to revise the hierarchy/outline. If so, then revisit the outline and make necessary changes. Writing is a reiterative process and only gets better with rewriting.

14. OWNERSHIP OF STUDENT WORK:

The College of Architecture reserves the rights to retain, exhibit, and reproduce work submitted by students. Work submitted for grade is the property of the College and remains as such until it is returned to the student. For exhibition purposes, please keep all material available for the instructor at the end of semester.

15. ACADEMIC INTEGRITY STATEMENT

Academic integrity is taking responsibility for one's own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement, which then must be measured. Academic achievement includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are a device used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University ("University") Quality Enhancement Plan, Academic Integrity Task Force, 2010]

16. CIVILITY IN THE CLASSROOM STATEMENT:

Texas Tech University is a community of faculty, students, and staff that enjoys an expectation of cooperation, professionalism, and civility during the conduct of all forms of university business, including the conduct of student–student and student–faculty interactions in and out of the classroom. Further, the classroom is a setting in which an exchange of ideas and creative thinking should be encouraged and where intellectual growth and development are fostered. Students who disrupt this classroom mission by rude, sarcastic, threatening, abusive or obscene language and/or behavior will be subject to appropriate sanctions according to university policy. Likewise, faculty members are expected to maintain the highest standards of professionalism in all interactions with all constituents of the university (www.depts.ttu.edu/ethics/matadorchallenge/ethicalprinciples.php).

17. WITHDRAWING FROM CLASS

Please withdraw on or before the University drop date. Please do not request a grade of 'l' without documented reasons allowed by the university.

18. ADA STATEMENT

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services in Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405..

19. RELIGIOUS HOLY DAY STATEMENT:

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

20. DISCRIMINATION, HARASSMENT, AND SEXUAL VIOLENCE STATEMENT:

Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other Title IX violations are not tolerated by the University. Report any incidents to the Office for Student Rights & Resolution, (806)-742-SAFE (7233) or file a report online at titleix.ttu.edu/students. Faculty and staff members at TTU are committed to connecting you to resources on campus. Some of these available resources are: TTU Student Counseling Center, 806-742-3674, https://www.depts.ttu.edu/scc/(Provides confidential support on campus.) TTU 24-hour Crisis Helpline, 806-742-5555, (Assists students who are experiencing a mental health or interpersonal violence crisis. If you call the helpline, you will speak with a mental health counselor.) Voice of Hope Lubbock Rape Crisis Center, 806-763-7273, voiceofhopelubbock.org (24-hour hotline that provides support for survivors of sexual violence.) The Risk, Intervention, Safety and Education (RISE) Office, 806-742-2110, https://www.depts.ttu.edu/rise/ (Provides a range of resources and support options focused on prevention education and student wellness.) Texas Tech Police Department, 806-742- 3931,http://www.depts.ttu.edu/ttpd/ (To report criminal activity that occurs on or near Texas Tech campus.)

21. LGBTQIA STATEMENT

I identify as an ally to the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community, and I am available to listen and support you in an affirming manner. I can assist in connecting you with resources on campus to address problems you may face pertaining to sexual orientation and/or gender identity that could interfere with your success at Texas Tech. Please note that additional resources are available through the Office of LGBTQIA within the Center for Campus Life, Student Union Building Room 201, www.lgbtqia.ttu.edu, 806.742.5433."

*If you prefer to list campus resources rather than a statement about ally status, you might include the following among other campus resources you wish to share:

Office of LGBTQIA, Student Union Building Room 201, www.lgbtqia.ttu.edu, 806.742.5433 Within the Center for Campus Life, the Office serves the Texas Tech community through facilitation and leadership of programming and advocacy efforts. This work is aimed at strengthening the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community and sustaining an inclusive campus that welcomes people of all sexual orientations, gender identities, and gender expressions.