Course Description

The learning experiences that will constitute the content of this course have been designed to extend and expand the knowledge you will be simultaneously building this semester during your enrollment in ADES 5520: An Introduction to Design Research Theory. These learning experiences will challenge you to develop, utilize and assess several ways of knowing and thinking about how to effectively contextualize, formulate, conduct, analyze and disseminate the results derived from particular engagements with design-led research. From August 25 to October 20, the coursework of ADES 5530 will enable and empower you to:

- gather, analyze and evaluate extant scholarship relevant to how design research processes and methods have positively catalyzed transformations in specific social, technological, economic, environmental and public policy situations in the past;

- advance and capably employ your facility to engage in decision-making processes fueled by divergent, convergent, transformative, sustainable and articulative knowing and thinking;

- construct and operate select tactical, analytical and evaluative aspects of design methods to aid perception and judgement, and to improve the experiences of particular users and audiences with specific products, services, environments, systems and communities.

These three areas of focus will both inform and be informed by your understandings regarding how and why a select array of theoretical approaches can be utilized to effectively guide design research in ADES 5520.

The coursework that will transpire between October 20 and December 15 will immerse ADES 5530 students in hypothetical, small-project-based learning situations. These have been designed to challenge you to work independently and as members of collaborative teams. These learning situations will also challenge you to effectively and appropriately deploy the new knowledge you will have assimilated or constructed during the first nine weeks of the semester in both ADES 5520 and ADES 5530.

Course Ethos

It is the express intent of the instructor of ADES 5530 to maintain a broadly informed, objectively facilitated teaching and learning environment. All involved with the evolution of this course should endeavor to allow and encourage each other to develop and exercise the critical skill sets necessary to analyze literature, arguments, and scientific, subjective and designerly assumptions related to the formulation and operation of design research methods. The more nuanced skill sets that participants in this course must explore and adroitly deploy as they critically yet respectfully assess the thoughts of their classmates and their instructor are crucial to its successful day-to-day operations. This mutuality of support and respectfully exercised criticism will make the classroom environment of ADES 5530 one in which a wide variety of ideas may be developed, explored, and brought to maturity.
Prerequisites
Acceptance into the MFA or MA program in Design at UNT CVAD with a Concentration in Innovation Studies, or special permission from the instructor and the instructor for ADES 5520.

Required Texts
The Elements of Style (Fourth Edition)
William Strunk, Jr. and E.B. White
Longman Publishers

Designing Qualitative Research, Fifth Edition
Catherine Marshall and Gretchen B. Rossman
Sage Publications

Design Methods (Second Edition)
John Chris Jones
John Wiley and Sons

Please note that all other required reading (specifically journal articles) will be provided as digitized documents in either a Dropbox location or a Google docs location by the instructor at the outset of each learning module in the course schedule.

Recommended Texts
Visual Research: An Introduction to Research Methodologies in Graphic Design (strongly recommended!)
Ian Noble and David Bestley
AVA Academic Press

Design Methods (strongly recommended!)
Brenda Laurel
MIT Press, Inc.

Designerly Ways of Knowing
Nigel Cross
Birkhauser

“Stretching” Exercises for Qualitative Researchers
Valerie J. Janesick
Sage Publications

Cultural Influences on Research Methods and Statistics
David Matsumoto
Waveland Press

Course Objectives
Between August 25 and December 15, students enrolled in this course will have gained the knowledge necessary to work independently and in collaborative teams to achieve the following objectives:

1. ensure that students gain experiential knowledge of established methods for designing, conducting, analyzing and assessing research processes and methods within the context of design;
Course Objectives (Continued)

2. familiarize students with established tactical approaches for utilizing specific research methods as a means to yield particular types of knowledge;

3. challenge students to analyze a select array of design research reports as a means to familiarize them with case studies of effectively designed, realized and “reported” design research projects;

4. begin to teach students a select array of means to measure the qualitative and quantitative outcomes of research processes (some of these activities will dovetail with the coursework of ADES 5520);

5. begin to sensitize students about a select array of methods for engaging in both applied and original research methods; (some of these activities will dovetail with the coursework of ADES 5520);

6. begin to teach students to formulate viable research questions (some of these activities will dovetail with the coursework of ADES 5520);

7. begin to teach students to write scholarly accounts of their research endeavors in a manner that will eventually afford them opportunities to publish accounts of their research projects in the leading scholarly resources recognized by the design research community (some of these activities will dovetail with the coursework of ADES 5520);

8. teach students to operationalize and effectively execute the effectively contextualized and well-articulated research proposals that they will have crafted in ADES 5520.

9. familiarize students with the ethical responsibilities design researchers must assume as they endeavor to meet the needs of their clients/project partners, and those who will be affected by the promulgation of the knowledge research can yield (to achieve this objective, each student will be required to craft and submit a mock request to conduct human subjects research with UNT’s Institutional Review Board);

10. teach students to use select methods of designing and engaging in (predominantly qualitative) research as a means to gain better understandings of a number of factors that affect and shape human behavior;

11. teach students to utilize the afore-mentioned methods for designing and engaging in qualitative research to determine how and why particular types of decisions are made by specific population groups;

12. ensure that students gain experiential knowledge regarding designing, managing and effectively assessing and interpreting the results of select research methods and processes;

13. ensure that students expand and extend their abilities to contextualize and develop the hypothetical research projects they manage over the course of the semester so that they meet high standards for originality, quality, significance and (if applicable) design autonomy;

14. sensitize students about the need to formulate particular aspects of their proposed research projects (specifically, interviews, questionnaires, and other data gathering activities) so that the data yielded by them is useful, useable, and “bias neutral;”
Course Structure

The majority of our class time will be devoted to the following activities:

1. the critical discussion of assigned reading and how what individual students will have gleaned from it could positively affect:
   - how students can begin to formulate respective, hypothetical research endeavors;
   - how students utilize extant scholarship to effectively guide the progress of their respective research endeavors;
   - how students can operate particular data gathering and measurement processes and methods to effectively support their research objectives.

2. the presentation and rigorous critical analysis of the students’ assigned coursework—some of this will involve dialectic that is informed by groups of students who have been configured into teams, and some of this will involve dialectic that is informed by the thoughtful efforts of individual students who will present their analyses to the entire group;

Each week, students will be assigned some or all of the following activities:

- readings
- small group discussion topics (these discussions must be facilitated outside of class)
- engagement in a research process-based activity or a tactical research exercise that constitutes essential aspects of their individual research projects
- documentation of their progress toward completing each of their assigned projects

Students enrolled in this course are expected to routinely contribute to a high-level of critical dialogue during class sessions and during the assigned outside-of-class discussions that will repeatedly transpire as the semester progresses. They will also be expected to effectively contribute to the activities that will periodically transpire within project teams.

Participation in Daily Classroom Dialogue: 20%
Assessment of Research Methods Reports >> Assignments One, Two and Three: 10% each x 3 = 30%
Mid-Semester Research Project Report: 20%
Final Research Project Report (this will supplant the final exam in this course): 30%

There are no opportunities to earn “extra credit” that can eventually be applied to the final course grade.

Student Assessment and Evaluation

§ If you cannot or will not make a viable contribution to our daily classroom dialogues, I will ignore or even curtail your participation in these in favor of those classmates who have proven themselves to be more engaged in them than you are. Do not expect me to “fill in the critical gaps for you” because of your inability to complete assigned reading.

Throughout the duration of the course, a student’s assertive, articulate participation in and thoughtful contribution to our daily critical dialogue will be imperative to his/her success within it—participation and dialogic contribution will directly affect individual student’s grades.§ Individual students will also be evaluated on their ability to use the knowledge they will have gained from the assigned readings, class dialogues and their ability to utilize information from sources they will have identified and discovered on their own to effectively complete the assigned research assessment reports and their individual, self-guided research that will transpire over the course of the entire semester. Students enrolled in this course will also be evaluated on their ability to consistently craft conceptually strong and well-reasoned, well-written material in support of their respective research processes as the semester progresses. The ability
Attendance Policy

Good attendance and punctuality are expected throughout the duration of this course. An inability to maintain either or both of these will have a very detrimental effect on your final course grade. Roll will be called at the beginning of every class period and again after the mid class-session break that will occur during every class period. You will be considered late if you arrive after roll has been called. If you are late, it is your responsibility during that class session to make sure that the instructor has not recorded you as being “absent” during that class session. Each student receives two (2) “free tardies” over the course of the entire semester. Beyond that, every two (2) tardies will equal one unexcused absence.

Only two (2) unexcused absences will be allowed over the course of the semester. The third unexcused absence will cause your final semester grade to be lowered by one full letter. The fourth unexcused absence will cause your final semester grade to be lowered by two full letters. The fifth unexcused absence will cause your final semester grade to be lowered by three full letters. A total of six absences, excused or unexcused, will result in you receiving a final letter grade of “F” for this course.

There are no excused absences for anything but a verifiable death in the immediate family or as corroborated by a doctor’s note on his/her stationery with a telephone number or an e-mail address. The doctor’s note must be presented at beginning of the class session that immediately follows the one you missed. A receipt from a doctor will not be accepted as corroboration of an excused absence.

Note: No cell phone use in class is permitted without prior permission from instructor.

Disability Accommodation (in Accordance with the American Disabilities Act)

The College of Visual Arts and Design is committed to full academic access for all qualified students, including those with disabilities. In keeping with this commitment and in order to facilitate equality of educational access, faculty members in the College will make reasonable accommodations for qualified students with a disability, such as appropriate adjustments to the classroom environment and the teaching, testing, or learning methodologies when doing so does not fundamentally alter the course.

If you have a disability, it is your responsibility to obtain verifying information from the Office of Disability Accommodation (ODA) and to inform the instructor of record (Michael Gibson) of your need for an accommodation. Requests for accommodation must be given to the instructor of record no later than the first week of classes for students registered with the ODA as of the beginning of the current semester. If you register with the ODA after the first week of classes, your accommodation requests will be considered after this deadline.

Grades assigned before an accommodation is provided will not be changed. Information about how to obtain academic accommodations can be found in UNT Policy 18.1.14, at www.unt.edu/oda, and by visiting the ODA in Room 321 of the University Union. You also may call the ODA at 940.565.4323.

Course Risk Factor

This course has a Risk Rating of Level 2. This means that students may be exposed to some significant hazards but are not likely to suffer serious bodily injury. In this course, those risks are related to X-acto knife usage, the dangers inherent in accidentally inhaling adhesives and fumes, and repetitive stress injuries that can result from extended computer use. Students will be informed of any potential health hazards or potential bodily injury connected with the use of any materials and/or processes and will be instructed regarding how to proceed without danger to themselves or others.

Students who are pregnant or will become pregnant during the course of the semester are advised to check with their doctor immediately to determine if any additional risks are reason to postpone this
Course Risk Factor (Continued)

Course Risk Factor (Continued)  course until a later semester. Upon request, the instructor of record will provide a list of chemicals and safety issues regarding your enrollment in the course for your doctor to review. Material Safety Data Sheets are available regarding all chemicals used in CVAD courses. It is your responsibility and the responsibility of your doctor to determine what course of action to take.

Building Emergency Procedures

In case of an emergency (an alarm will sound), please follow the building evacuation plans posted on each floor of your building and proceed to the nearest parking lot or public park. In the case of a tornado (campus sirens will sound) or other weather related threat, please go to the nearest hallway or room on your floor without exterior windows and remain there until an all-clear signal is sounded. Follow the instructions of your instructors and act accordingly.

Center for Student Rights and Responsibilities

The following statement reminds students of their rights and responsibilities within the academic community: “Each University of North Texas student is entitled to certain rights associated with higher education institutions. See www.unt.edu/csrr for further information.”

Additional Policies and Procedures

No cell phone, smart phone or tablet computer use of any kind is allowed during any of the class sessions of this course, unless this use is approved by the instructor of record and supports an approved class activity. Laptops may occasionally be used during class (and will sometimes be necessary to engage in coursework/facilitate the learning experiences inherent in this course), but be aware that their use is subject to the permission of the instructor on a class-session by class-session basis.

The Possibility of Alterations to the Syllabus

The professor reserves the right to change this syllabus with or without notice at his discretion. Moreover, based on the fluid nature of the course, the potential for dynamic change as a result of the evolution of particular assigned coursework and the learning activities that support it, the professor may and will likely elect to change select projects, learning experiences, outcomes, scheduling, assessment methods and inside- and outside-classroom activities as the semester progresses. At his discretion, the professor will alert students to any changes if and when they are to occur.

Student Granting of Permission to Publish Work Created to Meet the Requirements of ADES 5530

1. Grant of Permission. I, the undersigned, am a student at the University of North Texas (UNT) and I am enrolled in one or more CVAD graduate or undergraduate courses. By the authority of my signature below, I hereby grant UNT permission to utilize, copy, reproduce, publish, distribute or display any and all works created to comply with the requirements of this course in accordance with the terms set forth below. Additionally, I consent to the disclosure of the work created in this class as may be accompanied by my name and other personally identifiable information for purposes as set forth below, as long as the personal information released does not violate UNT FERPA mandates.

2. Scope of Permission. This permission extends to the use of the work described as well as images of this work: (one) for academic purposes in order to demonstrate examples of student work to current and future UNT students; (two) for public display in the galleries or on the campus of the UNT or on one or more of the UNT or CVAD websites; (three) for promotional materials created by UNT in all forms of media now known or later developed, including but not limited to exhibitions, catalogues, direct-mail, websites, advertising and classroom presentations. My permission is on-going and will continue until such time as I revoke it by giving UNT three months written notice of revocation to the instructor of record for this course. UNT will have three months from the date of my notice to stop all use in accordance with this permission.
3. **Certificate of Ownership.** I am the owner of all work submitted in accordance with the requirements of the named course and the work is not subject to any grant or restriction that would prevent its use consistent with this permission. All aspects of the work are original to me and have not been copied. I understand that as owner of the work I have the right to control all reproduction, copying and use of the work in accordance with U.S. copyright laws.

4. **Privacy Release.** I hereby authorize and consent to the release, maintenance and display of my name if necessary and any other personally identifiable information that I have provided in connection with the work and its use in accordance with the terms of this Agreement.

5. **Signature.** By signing the attached Student Syllabus Agreement I hereby grant the permissions indicated above. I understand that this grant of permission relates only to the use of the described work. This is not an exclusive right and I may sell, give or otherwise transfer the rights to such work to others on a non-exclusive or exclusive basis. However, in the event that I do sell, give or otherwise transfer ownership or the exclusive right to use my work to another party, I will notify UNT immediately in writing through the instructor of record for this course. UNT will have three months from the date of my notice to stop all use in accordance with this permission.
Student Acknowledgement of Course Parameters for ADES 5530 | Design Research Methods as Set Forth in This Syllabus

I, .................................................................................................... (<< please print your name), acknowledge that I have read the course syllabus. I understand the course structure, grading and attendance policies, risk factor rating, and the Student Grant of Publication Permission. By signing this agreement, I acknowledge that I agree to the syllabus and all of its provisions.

Student name ....................................................................................................

Signature .........................................................................................................

Phone contact number ....................................................................................

e-mail .............................................................................................................

Date ............................................................................................................... 

(Sign and return this form to your instructor no later than 09.01.11.)
**Course Schedule-in-Brief**

**Week 01 | August 25**

Begin Course Section One (8.25–10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Course Overview >>

Briefing re: Class Policies and Procedures >>

Launch of Exercise One, Part One >>

Introducing the evolutionary development of design research methods to yourself and then to the rest of us; each student will be placed into a presentation team, which must make a visual and verbal presentation to the entire class on September 8 re: "what they will have gleaned from their assigned readings...". Each presentation team must make an initial visual and verbal presentation on September 1 regarding what they feel were and are the most crucial/seminal foundation concepts, structures and "big revelations" that will have been gleaned from their readings.† What each team presents one week from tonight should be a well-orchestrated prelude to what they will present on September 8. Hint: research informed by design is an iterative process, one that should seek to make the complex understandable for a particular audience.

Readings >>

from *Design Research Now*, ed. by Ralf Michele, the following essays/articles:

"Design Research, an Oxymoron" by Klaus Krippendorff

from *Design Methods*, by J. Chris Jones, the following chapters:

"Chapter 1: What is Designing?"

"Chapter 2: Traditional Methods"

from the ADES 5530 Dropbox, the following essays/articles:

"Design Methods: Seeds of Human Futures' An Introductory Lecture for Digital Designers," by Rhodes Hileman;

"Fundamental Research Issues Crafted As a Series of Questions..." by Vanessa Richards and Ken Friedman

"Five Big Words" by William M.K. Trochim;

"A Set of Criteria for Evaluating Your 'Visual + Verbal,' Small-Group Presentations (Hint: this is the "Nuts & Bolts" folder, nested in a secondary folder called "About Making 'Good' Presentations")

**Week 02 | September 1**

Continuation of Course Section One (8.25–10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Group Presentations in Response to the Parameters Given for Exercise One, Part One >>

Class discussion/critical analysis re: each group’s verbal and visual presentation of their Exercise One, Part One materials.

Launch of Exercise One, Part Two >>

Based on the critical feedback proferred from the instructor and their classmates re: their verbal and visual presentations of their Exercise One, Part One materials, each group must revise their verbal and visual presentations and present their "revised and hopefully improved" materials to the entire class.
Course Schedule-in-Brief (Continued)

on September 8. Each group’s revised presentation materials will be critically analyzed and discussed by
the instructor and the entire class during this class session. Each group is required to configure this revised
presentation in a manner that makes its contents (and its organization) accessible in digitized form to their
classmates and to the instructor. The utility of whatever digitechnical hardware and software each group
deems necessary to accomplish the objectives of their presentation is allowed. Each group should take care
to effectively cite material from the assigned readings from Weeks 01 and 02.

Readings >>
from the ADES 5530 Dropbox, the following essays/articles:
“Simplicity Is Not the Answer,” by Donald Norman;
“A Scenario for Design,” by Wolfgang Jonas;
“Stepping Stones Across the Gap: Explorations in the Generative Design Space,” by J. Halse et al;
“Friedman W 2010 RWW 1,” by Ken Friedman

from Design Research,†† ed. by Brenda Laurel, the following essays/articles:
“The Design Cluster,” by Peter Lunenfeld;
“Muscular Design,” by Benda Laurel;
“Qualitative Methods, from Boring to Brilliant,” by Christopher Ireland;
“Ethnography and Critical Design Practice,” by Tim Plowman;
“The Paradox of Design Research,” by Bonnie McDaniel

Week 03 | September 8
Continuation of Course Section One (8.25–10.20): Introducing the Language, History, Methodologies
and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Group Presentations in Response to the Parameters Given for Exercise One, Part Two>>
Class discussion/critical analysis re: each group’s verbal and visual presentation of their Exercise One,
Part Two materials, which should consist of thoughtfully revised versions/“improved iterations”
of the presentations they made to the entire class last week: these digitechnically abetted and
realized presentations must be made available to the entire class and to the instructor (these may
be uploaded to a variety of online resources that your group makes available to the rest of the class,
or you may simply distribute these to your classmates and myself on DVD-Rs).

Launch of Exercise Two >>
Each student must verbally and visually present case studies or other forms of explanation that he/she
deems effective that exemplify and/or succinctly yet clearly “explain” the following types of research studies
(to begin with, you should inform us as to whether or not these types of studies are either qualitative
or quantitative, after you’ve articulated the difference between these…):
·theoretical and empirical research (contrast these…);
·historical research;
· descriptive research;
·correlational research;
·nomothetic research;
·probabilistic research;
·causal versus comparative research;

Each student must also provide two examples of the following types of research questions:
· descriptive;
· relational;
· causal;
Course Schedule-in-Brief (Continued)

Each student must also provide an example/case study of a cross-sectional study and a longitudinal study; each student must also provide an example/case study of two research situations that required inductive approaches to yield a better understanding of “what was occurring within them,” and two research situations that required deductive approaches to yield a better understanding of “what was occurring within them.” Explaining the difference between deductive and inductive reasoning in a manner that can be easily and effectively understood and remembered by the entire class (and yourself, for all sorts of “future reference”) is highly recommended.

And: each student must somehow address what J. Chris Jones describes as “Designing As a Three-Stage Process” as they present select case studies or other forms of explanation. (Hint: you’ll need to find out about what he means when he uses the terms “divergence,” “transformation,” and “convergence.”)

The case studies you choose can be derived from any academic discipline or profession—the key is to choose examples that you can support verbally and visually and that don’t require your audience (or you) to have to have a Ph.D. in a particular area to clearly and simply understand the essential content of what is being presented—for some of you, what you learn this semester will be vital toward your advancement into the doctoral level of study...

Each of your presentations must be rendered and presented in a manner that ensures they can be digitechnically shared with the entire class. These initial, “first-round versions” of these presentations must be given 9.15.11 (next class session), while each student’s final version of these presentations is to be presented to myself and your classmates on 9.22.11. Please be sure to provide a digital copy of your presentation to each of your classmates and myself by the culmination of the 9.22.11 class session.

Readings >>

from the ADES 5530 Dropbox, the following essays/articles:
“Nuts & Bolts Research Issues Framed in Questions” compiled by Michael Gibson, Vanessa Richards and Ken Friedman;
“Nuts & Bolts Research Terms” by Michael Gibson;
“Deduction and Induction” by William M.K. Trochim, excerpted from The Research Methods Knowledge Base

from Design Methods, by J. Chris Jones, the following chapters:
“Chapter 5: The Design Process Disintegrated”;
“Chapter 6: Choosing Strategies and Methods”

from Design Studies: Theory and Research on Graphic Design,†† edited by Audrey Bennett:
“Design Methodologies: Toward a Systematic Approach to Design” by Matt Cooke;
“From Formalism to Social Significance in Communication Design” by Jodi Forlizzi and Cherie Lebbon

Week 04 | September 15

Continuation of Course Section One (8.25—10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Individual “First-Round Versions” of Student Presentations in Response to the Parameters Given for Exercise Two>>
Course Schedule-in-Brief (Continued)

Class discussion/critical analysis re: each student’s verbal and visual presentation of their sets of case studies/other forms of explanation that reveal/explain/unwrap/compare and contrast the issues called for in the parameters of this exercise.

Launch of Exercise Two, Part Two >>

The critical feedback that each student receives during this evening’s class session should inform the final manifestation of these presentations, which will be due at the beginning of the next class session on 9.22.11. Remember that the digitechnically abetted and realized presentations that each of you will facilitate during class next week must be made available to the entire class and to the instructor by the end of the class session.

Readings >>

from the ADES 5530 Dropbox, the following essays/articles:

“Structuring Research Design” by William M.K. Trochim, excerpted from The Research Methods Knowledge Base;

“Introduction to Validity” by William M.K. Trochim, excerpted from The Research Methods Knowledge Base;

“Ethics in Research” by William M.K. Trochim, excerpted from The Research Methods Knowledge Base;

“Nuts & Bolts re: Designing Qualitative Research” adapted from work by Catherine Marshall and Gretchen B. Rossman in Designing Qualitative Research, Fifth Edition

“An Overview of the Case Study Method” by Martyn Shuttleworth

Week 05 | September 22

Continuation of Course Section One (8.25—10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Group Presentations in Response to the Parameters Given for Exercise Two, Part Two >>

The digitechnically abetted and realized presentations that utilize well-chosen case studies/other forms of explanation to “cover off” on the issues that appear on the bottom of page 10 and the top of page 11 of this document must be made to myself and your classmates at the beginning of tonight’s class session. Please remember that digitized copies of each of your presentations must be made available to each of your classmates and myself.

Launch of Exercise Three, Part One >>

Students will once again be formed into teams§§ who must work together to design verbal and visual presentations that use a combination of case studies and other citable materials and references from scholarly sources to reveal/explain/unwrap/compare and contrast the following:

- compare/contrast/explain the differences between Exploratory Research and Preliminary Research
- compare/contrast/explain the differences between Basic Research, Applied Research and Clinical Research
- provide case study examples/explanations of Phenomenological, Practice-Led, Hermeneutic, Positive, Normative and Expressive Research
- the difference(s) between epistemology and methodology
- the difference(s) between positivism and post-positivism
- compare and contrast conclusion validity, internal validity, construct validity, and external validity between/
among four to six inferences, propositions or conclusions of your choosing
at least four examples of what your team considers ethical transgressions/violations of research practices
and/or research reporting.

Each team must make a visual and verbal presentation of their Exercise Three, Part One materials to the
entire class on 9.29.2011. This presentation will be the initial presentation of all of the materials required
to fulfill the parameters for Exercise Three.

Readings >>
from the ADES 5530 Dropbox, the following essays/articles:
“Positivism & Post-Positivism” by William M.K. Trochim, excerpted from The Research Methods
Knowledge Base;
“Case Study Research, Design and Methods” by Robert K. Yin;
“Meta-levels in Design Research: Clarifying the Roles we play in Design, Research and Elsewhere”
by Pieter Jan Stappers

from Design Research, ed. by Brenda Laurel, the following essays/articles:
“Design (As) Research” by Anne Burdick;
“Speculation, Serendipity and Studio Anybody” by Lisa Grocott
“Designwriting” by Anne Burdick

Week 06 | September 29
Continuation of Course Section One (8.25–10.20): Introducing the Language, History, Methodologies
and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Team Presentations in Response to the Parameters Given for Exercise Three, Part One>>
Class discussion/critical analysis re: each team’s verbal and visual presentation of their sets of case
studies/other forms of explanation that reveal/explain/unwrap/compare and contrast the issues
called for in the parameters of this exercise.

Launch of Exercise Three, Part Two >>
Based on the critical feedback preferred from the instructor and their classmates re: their verbal and visual
presentations of their Exercise Three, Part One materials, each group must revise their verbal and visual
presentations and present their “revised and hopefully improved” materials to the entire class on 10.06.
2011 as Exercise Three, Part Two (Ex 3, Pt 2). Each group’s revised presentation materials will be critically
analyzed and discussed by the instructor and the entire class during this class session. Each group is
required to configure this revised presentation (Ex 3, Pt 2) in a manner that makes its contents (and its
organization) accessible in digitized form to their classmates and to the instructor. The utility of whatever
digitechnical hardware and software each group deems necessary to accomplish the objectives of their
presentation is allowed. Each group should take care to effectively and appropriately cite material
from the sources within which they were found.

Readings >>
from Design Research: Methods and Perspectives, ed. by Brenda Laurel the following essays/articles:
“Overview of Quantitative Methods in Design Research” by Stacey Purpura;
“Bringing Clarity to the ‘Fuzzy Front End’” by Darrel Rhea
Course Schedule-in-Brief (Continued)

from *Design Research*, by Peter Downton, the following chapters:
“Chapter 1: Introduction: Some Conceptual Basics”

from *Design Methods*, by J. Chris Jones, the following sections/chapters:
commence reading/skimming/perusing Part 2: Design Methods in Action, which begins on page 87, and part 2, Section 1: Prefabricated Strategies (Convergence), which begins on page 94 and ends on page 166.

**Week 07 | October 6**

Continuation of Course Section One (8.25—10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Team Presentations in Response to the Parameters Given for Exercise Three, Part Two

Class discussion/critical analysis re: each team’s revised verbal and visual presentation of the types, methodological approaches, constructions and ethical issues that contextualize and inform research in and around design.

Launch of Exercise Four, Part One

Students will work individually over the course of the next two weeks as they engage in processes essential to the conceptualization of research. This is one of the most challenging (and, unfortunately in the current canon of design research literature…) one of the least well-documented aspects of the design research process. Simply put, the primary operative question that will drive this learning experience is: “How should you begin to develop an idea that can be formed into a research project?” The secondary operative question that will drive this learning experience is: “How should you formulate a ‘good’ research problem?”

Each student must make a visual and verbal presentation to the class during next week’s class session that entails the brief articulation of at least four preliminary formulations of research problems. Each of these must have the potential to be effectively addressed by teams of design researchers, or by teams of researchers comprised of people from diverse backgrounds who could effectively address a problem using design research methods and perspectives. The formulations each of you must present next week can arise from the following sources and methods:

- practical experiences that emerge from daily life situations you have experienced or observed;
- a review of literature in or related to a particular discipline, or S.T.E.E.P. situation;
- scanning government, foundation and corporate RFPs and RFAs (Requests For Proposals and Requests For Applications, respectively) for “problems they’d like researchers to attempt to solve;”
- scanning the abstracts of recently funded research projects from government agencies, foundations and corporate organizations

Each of you must support your array of formulations with whatever contextual/evidentiary material(s) that you feel “helps you make the best case possible regarding why the problems you will have formulated are worthwhile.” **Making extensive use of concept maps to help you contextualize/frame your formulations (and to help the rest of the class understand them) will be imperative to the success of your efforts re: Exercise Four.** The critical discussion that will ensue after each of your presentations will provide you with the necessary feedback to begin Exercise Four, Part Two.
Readings >>

from the ADES 5530 Dropbox, the following essays/articles:

“Problem Formulation” by William M.K. Trochim, excerpted from *The Research Methods Knowledge Base*;
“Concept Mapping” by William M.K. Trochim, excerpted from *The Research Methods Knowledge Base*;
“Research Writing Workshop RWW 2” by Ken Friedman, Dean of Design, Swineburne University of Technology, Melbourne, Australia

from *Design Research: Methods and Perspectives*, ed. by Brenda Laurel the following essays/articles:
“Non-Assumptive Research” by Dorothy Deasy

from *Design Studies: Theory and Research on Graphic Design*, edited by Audrey Bennett:
“Activity Theory: A Model for Design Research” by Judy D’Ammasso Tarbox;

**Week 08 | October 13**

*Continuation of Course Section One (8.25—10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research*

**Due: Presentations from individual students that satisfy the parameters for Exercise Four, Part One**

Class discussion/critical analysis re: each student’s visual and verbal presentations of at least four formulations of their respective research problems that have been articulated as concept maps. These concept maps should allow the potential “problematic situation” that each student has identified to be well-understood by audiences comprised of diverse groups of individuals. Remember that a concept map used in this way should allow audience members to comprehensively understand **how** and **why** all of the issues and factors that affect and are affected by your situation operate in the manner that they do. Remember also that a concept map developed to support the type of endeavor you have all been challenged to confront must succeed in making it possible for diverse groups to understand, to **visualize**, how the different issues and factors that affect your situation (and each other) are co-related. The ultimate goal of a concept map utilized in the research formulation process is to make complex, “wicked” problems more understandable and therefore more approachable and even, ultimately, resolvable.

**Launch of Exercise Four, Part Two**

Students will work individually over the course of the next week to prepare revised formulations of the one research problem that was assessed to have the greatest merit/“be most worthy of further pursuit” from among the four presentations (as concept maps) that were made this evening. Each student should present one or two revised iterations of a more complex concept map that better articulates the problem situation they have identified that they wish to propose formulations to address, or each student can present four to seven less complex, revised iterations of concept maps that achieve this objective.

Readings >>

from the ADES 5530 Dropbox, the following essays/articles:

carefully peruse the array of concept maps that have been placed here, and use their structures to inform the construction of your own.
Course Schedule—
in-Brief (Continued)

Week 09 | October 20

Continuation of Course Section One (8.25—10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Presentations from individual students that satisfy the parameters for Exercise Four, Part Two>
Class discussion/critical analysis re: each student’s visual and verbal presentations of at least four preliminary formulations of research problems that have the potential to be effectively addressed by teams of design researchers, or by teams of researchers comprised of people from diverse backgrounds who could effectively address a problem using design research methods and perspectives.

Launch of Exercise Four, Part Three >>
Students will work individually over the course of the next week to prepare revised formulations of one of their complex concept maps (or two to three of their “less complex” content maps) that they will each have presented by 9:20 pm this evening. Please do not spend an inordinate amount of time on this...
Each of you must then utilize your respective concept map(s) to bolster/help you formulate a preliminary literature review that contains at least 12 (twelve) scholarly/scientific citations in its “References” section. This list of citations in the References section must be preceded by a 600- to 900-word narrative that clearly synopsizes how the pieces/articles/chapters/books/news stories that have been cited support the formulation of your final research problem. Bear in mind the primary intentions of a Lit Review as you prepare yours:

- to identify and describe endeavors that are similar to yours, or that “involve” or “address” the essential issue or issues that you have identified;
- to account for all the possible outcomes of an endeavor like yours—you need to be sure you haven’t “overlooked or ignored” an essential variable, construct, or mitigating factor that, if it were not effectively accounted for, could potentially damage the credibility of whatever it is you’re trying to achieve;
- to help you identify the most appropriate means for you to measure/assess the effectiveness of whatever it is that you’re proposing;
- to help you identify/effectively anticipate the types of problems that could occur as your research endeavor evolves, or that have occurred in the past as others have dealt with research contexts similar to yours;
- finally—and this is very important to remember!—a good lit review is driven/guided by a central concept or theme (e.g., the objective of your research, your primary argument, the essential problem/issue you’re attempting to address)... it is NOT merely a list of summaries or a listing of the array of work you’ve found.

Readings >>
Thoroughly read, re-read and make sure you understand the contents you encounter at the following web addresses:

http://www.writing.utoronto.ca/advice/specific-types-of-writing/literature-review
(note: this piece is also available as a .pdf on the course website as d_Taylor_literature-review.pdf)

http://www.library.american.edu/Help/tutorials/lit_review/index.html
(note: please be sure to peruse the material from the following links within this site:

- What is a Literature Review?
- What a literature review is not...
Course Schedule-in-Brief (Continued)

- Why do a literature review?
- Questions to ask yourself about the materials
- Sample literature review
- How can a librarian help?
- Checklist to get started
- Stages of doing a literature review
- Sources for more information
- Citation Style Guides

Week 10 | October 27

Culmination of Course Section One (8.25–10.20): Introducing the Language, History, Methodologies and Scholarly Paradigms Necessary to Facilitate Design Research

Due: Presentations from individual students that satisfy the parameters for Exercise Four, Part Three>>
Each student must make a presentation that synopsizes the information (and, hopefully, the knowledge) they will have gained from completing their 600- to 900-word literature review that contains at least 12 (twelve) scholarly/scientific citations in its “References” section.

Commencement of Course Section Two (10.20–12.15): Engaging in Research Project-Based Learning

Launch: Assignment One, Part One >>
Students will work individually during this assignment to critically analyze two pieces from the “Places and Spaces: Mapping Science” exhibit currently on display at UNT’s Discovery Park. (The specific parameters for these written analyses are presented below.) This exhibit, which was curated by information scientist Katy Borner from the University of Indiana, presents several types of examples of what Borner and her colleagues refer to as “maps of science,” or “science maps.” The two pieces–there are 70 in total in the exhibition–about which you are to write critical analyses should be placed into two distinct categories for analysis. The first can be defined using this simple descriptor: “[map x] has been visually configured so that its aesthetic forms work to effectively facilitate its functionality, which is to communicate its information to a given audience in a manner that makes that information understandable to them.” The second can be defined in terms that oppose the first: “[map x] has NOT been visually configured...”

Try to choose the two maps you’ll analyze so that each one can be used as an “effective counter” to the criticism you offer for the other. By doing this, you’ll allow the readers of your two analyses to perceive the two of them as a kind of matched set, so that what you write in support of your analytical criticism for one piece becomes much more effectively understood when it is read in context with its “partner.” Each of your two paired analyses must be written at a length of no shorter than 500 words and no longer than 900. What follows are some of the critical issues that should be accounted for in each of your analyses (each of you must address at least four of the seven that have been articulated below in each of the two criticisms you write). Please bear in mind that you must provide well-articulated rationales for why you have chosen to laud or castigate particular aspects of the pieces you have chosen to criticize as you address these critical issues.

- Assess each piece from a connotative and denotative perspective
- As these pieces each depict visualizations of data, assess how effectively they stimulate viewer attention and engagement (bear in mind that a piece that may garner attention and engagement from one persona may not garner it from another)
- Assess each piece semiotically—the challenge for each re: satisfying this parameter will be to “get beyond description and your opinion” to arguments that are effectively bolstered by your ability to interpret the cultural signs/indicators that are manifest in each of them.

- Assess each piece in terms of how effectively it allows its audience(s) to recognize patterns of particular types of occurrences within the data.

- Assess each piece in terms of how effectively it allows its audience(s) to infer particular types of relationships between the sets of data that are being presented.

- Assess each piece as an entity that must allow its audience(s) to engage in whatever cognitive processes are necessary for it/them to derive meaning from it that facilitates their ability to quantitatively compare data within the construct itself (ask questions that examine whether or not the graphic realization of forms distorted or obscured the understanding of essential statistical data, or caused it be misinterpreted... a good starting point for this line of inquiry is “can the audience[s] effectively discern and then utilize a hierarchy of information to cognitively ‘navigate their way through’ the array of data?”)

- Assess each piece as a purely aesthetic entity, which will require you to critically examine whether or not the array of typographic, symbolic, and photographic forms (as well as the spaces that occur between them...) that comprise the entire construct were arranged and physically treated in a manner that contributed to its empirical “success or failure;” this last parameter affords you the opportunity to opine on the relative strength or weakness of the use of color, scale, texture, etc.—and the contrast or lack thereof between them—in each of the two pieces you choose to analyze.

Readings >>

from the ADES 5530 Dropbox, the following essays/articles:


(please also review the following selections on YouTube):

http://www.youtube.com/watch?v=YaGqOPxHFkc

http://www.youtube.com/watch?v=y6cyuRG7iZs&feature=related

http://www.youtube.com/watch?v=5uGRGqCFryg
Course Schedule-in-Brief (Continued)

Week 11 | November 3
Continuation of Course Section Two (10.20–12.15): Engaging in Research Project-Based Learning

Due: Presentations from individual students that satisfy the parameters for Assignment One, Part One >>

Each student must present initial outlines re: how he/she will address at least four of the stated assessment criteria for two of the “science maps” on display at UNT’s Discovery Park. Please note: it will likely be a good idea to utilize the same set of criteria for both of the pieces you choose to analyze.

Launch: Assignment One, Part Two >>

Each student must utilize the critical feedback he/she receives from his/her classmates and the instructor to inform and guide the preparation of the final versions of both of the analyses of the “science maps” about which he/she has chosen to write. Each of these 500- to 900-word documents is due one week from this evening (Thursday, November 10).

Readings >>

http://www.wearedesignbureau.com/projects/dialogue-design-writing-criticism/
http://www.alistapart.com/articles/design-criticism-creative-process/

and most especially: http://dcrit.sva.edu/

(re: the last URL, you need to read “a smattering of the material highlighted in the rightmost column”)

Week 11 | November 10
Continuation of Course Section Two (10.20–12.15): Engaging in Research Project-Based Learning

Due: Presentations from individual students that satisfy the parameters for Assignment One, Part TWO >>

Each student must present one of his/her two criticisms of the “science maps” on display at UNT’s Discovery Park to the instructor and to his/her classmates. Please bring a copy for everyone (or place one in the “science map crits” folder in the course Dropbox), and be prepared to read your selection to us or to synopsize its most salient points. Whichever you choose, bear in mind that you must “prepare” (i.e., rehearse) whatever you present to us, which means you are not allowed to read too quickly, or in too much of a monotone, or comport yourself in any other manner that might bore us and thus cause us to not care about, much less remember, the essence of your criticism.

Launch: Assignment Two, Part One >>

Students will again be placed into teams of two to three students each, and challenged to utilize Ethnographic Research Methods (in this case, micro-ethnographic methods…) to:

1. conduct both an etic (internal) and an emic (external) investigation of a given community/population group as a means to–
Course Schedule-in-Brief (Continued)

2. better understand how the inherent belief systems (social, cultural, religious, economic, political...) of the members of that community/population group affect and influence a particular aspect (or select aspects) of their behavior so that—

3. a specific research question can be examined in a manner that can yield valuable insights that can then—

4. positively guide the design of a particular service or experience (or the conditions that affect the evolution of these) to benefit the given community/population identified in step 1.

Each team must make a visual and verbal presentation during next week’s class session that presents three potential research questions that, if effectively examined by utilizing micro-ethnographic research methods, could guide the facilitation of a service, an experience, or the “improvement of an undesirable situation” for the benefit of three different, local (e.g., D-FW-Denton metroplex-based) community or population groups. In short, each group is responsible for visually and verbally presenting three questions per three community groups (nine total questions; three sets of three questions), that utilizing micro-ethnographic research methods could effectively inform.

Readings >>

from the ADES 5530 Dropbox, the following essays/articles:

“IIS_wkshop_research_question.pdf,” by The Institute of International Studies at The University of California at Berkeley, excerpted from their Dissertation Proposal Workshop;

“Ethnography in Design,” by Andrew Blauveldt;

from A Designer’s Research Manual: Succeed in Design, by Jenn and Ken Visocky O’Grady, the following essays/articles:

“Chapter 1 (Part one): An Overview of Research in Graphic Design,” pages 13–35 (pay particular attention to the material from pages 26–35);

from Visual Research: An Introduction to Research Methodologies in Graphic Design, by Ian Noble and David Bestley:

Chapter 2 “Methods: Ways of Thinking” (pages 44–89).

Week 12 | November 17

Continuation of Course Section Two (10.20–12.15): Engaging in Research Project-Based Learning

Due: Presentations from student teams that satisfy the parameters for Assignment Two, Part One>>

Each team must make a visual and verbal presentation during this evening’s class session that presents three potential research questions that, if effectively examined by utilizing micro-ethnographic research methods, could guide the facilitation of a service, an experience, or the “improvement of an undesirable situation” for the benefit of three different, local (e.g., D-FW-Denton metroplex-based) community or population groups. Three sets of three questions (nine in total) must be presented.

Launch: Assignment Two, Part Two >>

Each team must utilize the critical feedback they receive during this evening’s class session to inform their preparation of a visual and verbal presentation that must be presented during next week’s class session.
Course Schedule-in-Brief (Continued)

This presentation must articulate how your team could make effective use of micro-ethnographic research methods to inform two different research project proposals, that, if undertaken, could positively catalyze the facilitation of a particular service, or that could improve a particular social, technological, economic, environmental or political experience for the members of a specific population group in the D-FW-Denton area. Individual teams may choose to create two project proposals that could be undertaken on behalf of the same population group, or teams may create project proposals that each benefit a different population group.

Readings >>
from the ADES 5530 Dropbox, the following essays/articles:


from Design Research Now, ed. by Ralf Michele, the following essays/articles:


Week 14 | December 1

Continuation of Course Section Two (10.19–12.14): Engaging in Research Project-Based Learning

Due: Presentations from student teams that satisfy the parameters for Assignment Two, Part Two >>
Each team must make verbal and visual presentations of research project proposals that articulate how the utilization of micro-ethnographic research methods could positively shape the facilitation of a particular service, or that could improve a particular social, technological, economic, environmental or political experience for the members of a specific population group in the D-FW-Denton area.

Launch: Assignment Three, Part One >>
Students must work individually to craft a visual and verbal presentation that accomplishes the following objectives as a means to immerse themselves in the preliminary research process:

1. it must articulate how the student will answer the following two questions re: how they might develop a research strategy to improve a specific S.T.E.E.P. situation on behalf of a particular D-FW-Denton-area population group:
   · “What kinds of issues do I wish to explore?”;
   · “What kinds of questions do I want to ask?”;

2. it must account for how the student could effectively survey an area of inquiry, map the relevant issues and understand the “topographic features” that constitute the field of inquiry. To achieve these objectives, it will be necessary to utilize some of the following tactics:
Course Schedule-in-Brief (Continued)

- engage in a lit. review
- engage in web analytics
- analyze demographics
- engage in primary research
- methods to glean essential insights re: key issues
- engage in an analysis of relevant case studies
- utilize information gleaned from focus groups
- engage in the creation and manipulation of personas
- engage in visual exploration
- engage in some form of ethnographic research

Readings >>
from A Designer’s Research Manual: Succeed in Design, by Jenn and Ken Visocky O’Grady, the following essays/articles:
“Chapter 1 (Part two): An Overview of Research in Graphic Design,” pages 36–64;
“Chapters 2-4 (the rest of this book), pages 64–186

from Design Research: Methods and Perspectives, ed. by Brenda Laurel the following essays/articles:
“Design Improvisation: Ethnography Meets Theatre” by Brenda Laurel;
“Designwriting” by Anne Burdick
“Bringing Clarity to the “ ‘Fuzzy Front End’ ” by Darrel Rhea

Week 15 | December 8
Continuation of Course Section Two (10.19–12.14): Engaging in Research Project-Based Learning

Due: Presentations from individual students that satisfy the parameters for Assignment Three, Part One >>
Each student must present a visual and verbal presentation that articulates how they can effectively engage in the preliminary research process as a means to improve a specific S.T.E.E.P. situation on behalf of a particular D-FW-Denton-area population group.

Launch: Assignment Three, Part Two >>
Students must work individually to utilize the critical feedback they will receive during this evening’s class session to revise their visual and verbal presentation re: how they will engage in the preliminary research process as a means to improve a specific S.T.E.E.P. situation on behalf of a particular D-FW-Denton-area population group. This revised visual and verbal presentation must be made during next week’s class session.

Readings >>
from Design Studies: Theory and Research on Graphic Design, edited by Audrey Bennett:
“Directed Storytelling: Interpreting Experience for Design” by Shelley Evenson;
“Personas: Practice and Theory” by John Pruitt and Jonathan Grudin;
“A Step Ahead of Praxis: The Role of Design Problem Definition in Cultural Ownership of Design” by Peter Martin
“Human Dignity and Human Rights: Thoughts on the Principles of Human-Centered Design” by Richard Buchanan