

## ENV 261 – Mixed Methods for Environmental Studies SYLLABUS – Fall 2018

**Professor: Jess Vogt** – Please call me “Jess”! ☺

**Email:** [jess.vogt@depaul.edu](mailto:jess.vogt@depaul.edu) or [jessica.m.vogt@gmail.com](mailto:jessica.m.vogt@gmail.com)

**Cell:** (920) 850-2016 – OK to call, text, and leave voicemails here; this is my only phone number

**Office:** McGowan South 203 G

**Office Hours:** By appointment (email me), but also, my door is always open.

**Class:** Tues/Thurs 9:40 – 11:10 am in McGowan South 401

**Lab:** Thurs 11:20 am to 2:30 pm in McGowan South 401 *or in the field as specified; See D2L & Course Calendar provided first day of class*

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### ABOUT THE PROFESSOR

Dr. Jess Vogt is an Assistant Professor in the Department of Environmental Science & Studies at DePaul University. She teaches courses in sustainability science, urban forestry, and mixed methods research. She has a Ph.D. in Environmental Science, a Master’s of Public Affairs in Sustainability, and a M.S. in Environmental Science, all from the School of Public and Environmental Affairs at Indiana University. Jess is active in the urban forestry professional community, serving as an Associate Editor for the journal *Urban Forestry & Urban Greening*, as Director of Research for the Illinois Arborist Association, and Vice Chair of the Science & Research Committee of the International Society of Arboriculture. She was awarded the 2018 International Society of Arboriculture Awards of Distinction Early-Career Scientist Award. In August of 2018, Jess spent a month in Zhengzhou, China, as a Visiting Foreign Expert in the International Lab of Henan Provincial Landscape Architecture at Henan Agricultural University.

At DePaul, Jess runs LUFA: the Lab for Urban Forestry in the Anthropocene. LUFA does research at the intersection of urban forestry and sustainability science, examining how trees and urban greening activities can make cities more ecologically sustainable as well as livable for people. You can find more information about LUFA research as well as opportunities for students on our website: [www.lufa-depaul.org](http://www.lufa-depaul.org).

### Communication Philosophy:

In order to make this a successful learning experience for all of us, I am available to meet with students outside of class as much as possible. Therefore:

- I am in my office (203 G) or lab (217) on most weekdays between 9am and 5pm and my door is always open. Please feel free to stop by anytime with questions, comments or concerns about the class, or even just to chat!
- Email me or talk to me before or after class if you want to schedule an appointment.
- Feel free to call or text me on my cell phone (920-850-2016) during reasonable hours with questions or concerns. If you leave a voicemail, I’ll get back to you.

## **COURSE INFORMATION**

“Mixed methods research” aims to answer research questions that cannot be answered by one way of gathering information. For environmental science and studies, this means the mixing of quantitative and qualitative data and methodologies; the mixing of frameworks, theories, and analytical tools from the humanities, social sciences, and natural sciences; the mixing of theories and ideas from academic research with the knowledge and experience of professionals in fields of practice; and more.

### **Course Objective:**

By the end of this course, you will be able to design and conduct environmental science and studies research and evaluation using mixed methods. Through a combination of lectures and class discussions on research methods, a close reading of scientific articles that use mixed methods, practice using mixed methods data collection methods in class, and a real-life application of mixed methods research to a Northwest Indiana environmental case study, we will learn to design and apply mixed methods research tools.

### **Learning Outcomes:**

To achieve the above course objective, we will work our way through several learning outcomes specific to ENV 261. We will:

1. Be knowledgeable about the major philosophical and paradigmatic underpinnings of mixed methods research as they apply to environmental science and studies.
2. Have a capacity to read and evaluate scientific articles in environmental science and studies that utilize mixed methods research.
3. Understand how to develop good research questions, write clear research objectives, and select appropriate mixed methods to answer the research question(s).
4. Understand the importance of making quality observations – both visual (photos, videos, sketches, maps) and written (field notes) – and documenting the process of mixed methods research.
5. Be able to design and document protocols for mixed methods research, including drafting a research proposal/plan suitable for submission to an Institutional Review Board (IRB) for ethical Human Subjects Research.
6. Be able to design quality survey questions and be familiar with standard internet and by-mail survey implementation procedures (the Dillman Tailored Design Method).
7. Be able to conduct qualitative interviews and use qualitative coding methods to analyze these interviews.
8. Design and implement a mixed methods research evaluation for a real-life environmental case study (for Fall Quarter 2018, the evaluation of social and ecological outcomes of the CommuniTree program in Northwest Indiana).

## **COURSE MATERIALS**

### **Required Book:**

The required book for this class is the excellent mixed methods research text by Teddlie & Tashakkori (2009). I strongly recommend purchasing a hard copy of the book, rather than the e-book, or renting a copy, as this is

an excellent text for you to have in your library and will be helpful as a permanent reference should you ever have a job where data collection, analysis, or program evaluation is required.

Teddlie, Charles, & Abbas Tashakkori (2009). *Foundations of Mixed Methods Research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage Publications, Thousand Oaks, California. 387 pp. Available on Amazon: <https://www.amazon.com/Foundations-Mixed-Methods-Research-Quantitative/dp/0761930124>

**Additional Required Course Materials:**

In addition to the assigned textbook, a variety of additional material may be assigned, including but not limited to scientific articles, chapters from other books, and news stories, videos, or other content from the internet. These materials will be posted to D2L in weekly folders in Content >> Weekly Course Materials.

**Desire2Learn – D2L:**

All course materials will be posted to D2L, and most assignments will be turned in via D2L Dropbox. I will send class-related emails via D2L so make sure your email address is updated in the system. Inside D2L Content, there are a number of sections:

- Syllabus: Contains a copy of this syllabus
- Tips for Writing, Reading, Citing, Speaking: Documents you might find helpful for reading and citing scientific articles, and writing and speaking assignments for this and other classes.
- Assignments: Contains a module with information for each assignment (see Course Evaluation section below) including a Dropbox for turning in each assignment.\*
- Weekly Course Materials: A set of weekly modules, each containing PDFs of links to assigned readings or other course materials.

*\* Note that all documents turned in via D2L Dropbox should be in PDF or Microsoft Word form only. If I cannot open or read your file, I will not grade it and you will get a zero. If you need help converting from another word processor program (e.g., Pages, Google Docs) to PDF format, please let me know; I'm happy to assist.*

**COURSE EVALUATION & ASSIGNMENTS**

**Final Grade:**

Your final grade in the course will be based on the following. **No extra credit is available.**

ITEM	Points
Participation (incl. Reading Questions)	50
Paradigms Essay	75
Scientific Article Discussion Leadership	50
Lab Assignments	100
Research Design Portfolio	100
Group Project	100
Course Reflection	25
<b>TOTAL</b>	<b>500</b>

**Point Scale:**

The following point scale will be used to assign letter grades: A (92%-100%), A- (90%-91.9%), B+ (88%-89.9%), B (82%-87.9%), B- (80%-81.9%), C+ (78%-79.9%), C (72%-77.9%), C- (70%-71.9%), D (60%-69.9%), and F (0%-59.9%).

**Participation:** 50 points, including Reading Questions due each class

Your attendance and participation in class is crucial. Class time will always involve your active participation in class discussion about the readings/videos, activities in pairs and small groups, and other active learning exercises. Occasionally, I will collect work completed during class to assess our progress as a class. This work will be graded based on completion. If you miss a class, be sure to check in with me or a classmate to see what you miss and how to make-up the material.

**Reading Questions:** For each day of class, I'd like you to bring a minimum of five (5) questions that emerged for you during the reading. These should be concepts or ideas from the assigned chapter or scientific articles you want to discuss further, things you don't understand, key terms you'd like to go over, particular passages of interest you'd like to group-think on, or anything else you're thinking about while reading that you'd like to bring to class time. Referencing specific page numbers of readings is crucial in these questions. I will collect these from students at the end of each class (handwritten is fine) and they will factor into your participation grade.

**Paradigms Essay:** 75 points

DUE DATE: \_\_\_\_\_

After we learn about the various paradigms of mixed methods research in Weeks 1 and 2, you'll write a 1,000-1,500-word essay evaluating the extent to which the assigned scientific article (see D2L) is indicative of any or multiple of the paradigms; the full prompt is below. Your essay should be written as a formal paper to the instructor with proper grammar and organization. The essay should have an introduction and clear thesis statement, several paragraphs of supporting evidence including citations to assigned course materials (no outside research is required), a short conclusion, and a Works Cited at the end of the document. See Content >> Writing, Reading, Citing, Speaking Tips for helpful documents as you craft your essay.

**Prompt:** "Mixed Methods Paradigms & Social-Ecological Systems Research"

In Chapter 5, Teddlie & Tashakkori (2009) outline five (5) paradigms related to qualitative (QUAL), quantitative (QUAN), and mixed methods (MM) research: *positivism*, *postpositivism*, *constructivism*, *transformative*, and *pragmatism* (see in particular, the summary table on p. 88). Read the following scientific article (see D2L) and in your essay, explore the extent to which the article (its methodologies, approach, conclusions, etc.) reflects of one or more of the paradigms. Note that the article will not mention any of the paradigms by name, and in all likelihood, parts of the article may be indicative of different paradigms.

**Evaluation:** Your essay will be evaluated on your thesis statement, the sophistication of your argument, the quality and strength of the evidence you provide, and having proper grammar and citations. A full rubric is available on the Dropbox for essay submission on D2L in Content >> Assignments >> Paradigms Essay.

**Scientific Article Discussion Leadership:** *50 points, due dates vary* MY DISCUSSION DATE: \_\_\_\_\_

Four times during the quarter either during class or lab time, we will have a pair of students lead the class in an in-depth dissection and discussion on a scientific article that uses mixed methods. Once during the quarter, you will be assigned to lead this discussion. As a group, you are expected to generate at least 7 discussion questions and lead the class through a thoughtful discussion on the article, with the assistance of the instructor. Discussion questions should be uploaded via the D2L Group Dropbox before 7 pm (i.e., after class) on the day your group leads discussion. Only one individual per group needs to upload the group's final list of discussion questions. The schedule of discussion leaders as well as tips for leading class discussion are on D2L: Content >> Assignments >> Discussion Leadership

**Lab Assignments:** *100 points* DUE DATE: \_\_\_\_\_

Lab Assignments will be assigned and conducted during lab times and may require additional work outside of class time to complete. More information on particular assignments will be available on D2L in the module for each lab: Content >> Weekly Course Materials.

**Research Design Portfolio:** *100 points* DUE DATE: \_\_\_\_\_

The Research Design will give you a chance to design a project of your own using mixed methods data collection methods to answer a particular applied research question of your choosing. You'll work through the stages of research design, including determining a question, selecting a proper set of mixed methods and designing data collection instruments (e.g., survey, interview, observation, participant observation, etc.), and completing an Exempt Protocol to the Institutional Review Board (IRB). Additional information and worksheets to guide you through each stage of the design process will be provided on D2L and during class. See Content >> Assignment >> Research Design

**Portfolio:** You'll submit a portfolio containing all worksheets completed for the Research Design, your IRB Exempt Protocol, all data collection instruments, as well as a 1,500-2,000-word written narrative that clearly outlines your research question, objectives, and research design, and briefly explains the data collection instruments selected. The narrative should put your research design into context with at least 3 outside scholarly journal articles relevant to your chosen topic.

**Evaluation:** Your Research Design Portfolio will be evaluated on the basis of your articulation of research question(s) and objective(s), selection of an appropriate research design and data collection methods, design of quality data collection instruments, and presentation of a coherent narrative that briefly contextualizes the design with the literature. A full rubric is available on the Dropbox for essay submission on D2L in Content >> Assignments >> Research Design Portfolio.

**Group Project:** *100 points* DUE DATE: \_\_\_\_\_

The Group Project will be our opportunity to examine an actual case study and apply our mixed methods research skills to design and conduct the first part of an evaluation of the social-ecological outcomes of the CommuniTree program in Northwest Indiana communities. The project will occupy the bulk of our time in and out of class during the last couple weeks of the course. Additional information will be provided on D2L and during class as we near the middle of the quarter. See Content >> Assignment >> Group Project

**Course Reflection:** 25 points

DUE DATE: \_\_\_\_\_

The course reflection is a 300-word reflection of your experiences in this course due during Finals Week, reflecting on your personal growth and change as a consumer and producer of mixed methods research. Choose one (1) of the questions listed below and respond and reflect.

1. How has your personal conception or definition of what “mixed methods” means changed through the course? What particular parts of the course (assigned material, activities, etc.) contributed to this change? You might find it useful to document what you thought about mixed before entering this course.
2. What are some specific skills or information from this class that you think you will use in the future (either in a future class or a job)? Explain the skill/information how you think it may be of use.
3. What is missing from this class? If you could go back and add something, what would it be? Please accompany your answer with any suggestions of specific readings, videos, activities, you think would be useful for future students in ENV 261.
4. What will you take home (or have you already taken) from this class and share with your friends, family, relatives, etc.?

See Content >> Assignments >> Course Reflection.

**Late Assignments**

Late assignments will likely be accepted ***if you notify me in writing in advance of the due date***. Typically, I am willing to negotiate extensions with students who ask courteously and respectfully.

**ADDITIONAL CLASSROOM POLICIES**

**Minimum Technology Policy:**

Because participation and engagement with one another is so important, I prefer not to have any technology – laptops, tablets, phones, etc. - in the classroom (unless I specifically ask you in advance to bring an internet-enabled device to class).

**Here’s why:**

Studies have shown that allowing technology in the classroom is distracting and results in decreased student learning. Although we may think we are effectively “multitasking” when you’re simultaneously using multiple applications on our computers (or when you’re listening to class discussion and checking your email), you cannot truly do more than one thing at once. At best, “multitasking” results in what is called “fast switching,” or rapidly moving between separate activities, where at any instant all of your brain is only focused on one of the activities. Take it from Adam Gazzaley, MD, Ph.D., a professor of neuroscience at University of California, San Francisco (from his TED talk, [www.youtube.com/watch?v=tiANn5PZ4BI](http://www.youtube.com/watch?v=tiANn5PZ4BI)):

*“With each switch, there is a time delay, and this leads to a cost and an impact on performance. You do not do two things as well as you do one thing, if you switch back and forth between them.”*

Technology is a type of distraction and interference that impairs long-term and short-term memory, and, ultimately, learning. ***For these reasons and others, technology – computers/laptops, tablets, cell phones, etc. – are discouraged in the classroom*** when not specifically asked for. With these distractions at a

minimum, we will be able to more fully engage in the class, with each other and with the readings in class discussions and activities.

### **Email Etiquette:**

I would prefer that you use email communication for all class business. This way, we all have a record of communications (and so I will remember when I agreed to meet with you, etc.!). Please practice the following email etiquette, which you might find useful not just in this class, but in all your email communications.

- Use a short but descriptive subject line. **Something more than just “ENV 151” is crucial.**
- Continue conversations about the same topic or question in the same email thread by *replying* to the email rather than creating a new message.
- Emails should be as brief as possible but also include sufficient information for me to know what you’re asking.
- See [emailcharter.org](http://emailcharter.org) for more suggestions on email etiquette to help keep our inboxes manageable.

### **Online Teaching Evaluations:**

Instructor and course evaluations provide valuable feedback that can improve teaching and learning. The greater the level of participation, the more useful the results. As students, you are in the unique position to view the instructor over time. Your comments about what works and what doesn’t can help faculty build on the elements of the course that are strong and improve those that are weak. Isolated comments from students and instructors’ peers may also be helpful, but evaluation results based on high response rates may be statistically reliable. As you experience this course and material, think about how your learning is impacted.

Your honest opinions about your experience in and commitment to the course and your learning may help improve some components of the course for the next group of students. Positive comments also show the department chairs and college deans the commitment of instructors to the university and teaching evaluation results are one component used in annual performance reviews (including salary raises and promotion/tenure). The evaluation of the instructor and course provides you an opportunity to make your voice heard on an important issue – the quality of teaching at DePaul. **Don’t miss this opportunity to provide feedback.**

### **Academic Integrity:**

DePaul University is a learning community that fosters the pursuit of knowledge and the transmission of ideas within a context that emphasizes a sense of responsibility for oneself, for others and for society at large. Violations of academic integrity, in any of their forms, are, therefore, detrimental to the values of DePaul, to the students’ own development as responsible members of society, and to the pursuit of knowledge and the transmission of ideas. Violations include but are not limited to the following categories: cheating; plagiarism; fabrication; falsification or sabotage of research data; destruction or misuse of the university’s academic resources; alteration or falsification of academic records; and academic misconduct. Conduct that is punishable under the Academic Integrity Policy could result in additional disciplinary actions by other university officials and possible civil or criminal prosecution. Please refer to your Student Handbook or visit Academic Integrity at DePaul University ([academicintegrity.depaul.edu](http://academicintegrity.depaul.edu)) for further details.

### **Students with Disabilities:**

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling you to access accommodations and support services to assist your success. There are two office locations:

- Loop Campus – Lewis Center #1420 – (312) 362-8002
- Lincoln Park Campus – Student Center #370 – (773) 325-1677

Students are also invited to contact me privately to discuss your challenges and how I may assist in facilitating the accommodations you will use in this course. This is best done early in the quarter and our conversation will remain confidential.

### **Writing Center:**

I strongly recommend you make use of the Writing Center throughout your time at DePaul. The Writing Center provides free peer writing tutoring for DePaul students, faculty, staff, and alumni. Tutors work with writers at all stages of the writing process, from invention to revision, and they are trained to identify recurring issues in your writing as well as address any specific questions or areas that you want to talk about. Visit [www.depaul.edu/writing](http://www.depaul.edu/writing) for more information.

### **Dean of Students Office:**

The Dean of Students Office (DOS) helps students in navigating the university, particularly during difficult situations, such as personal, financial, medical, and/or family crises. Absence Notifications to faculty, Late Withdrawals, and Community Resource Referrals, support students both in and outside of the classroom. Additionally, they have resources and programs to support health and wellness, violence prevention, substance abuse and drug prevention, and LGBTQ student services. The Office is committed to your success as a DePaul student. Please feel free to contact them at [studentaffairs.depaul.edu/dos](http://studentaffairs.depaul.edu/dos).