

URBAN STUDIES
MASTER'S IN GEOSPATIAL TECHNOLOGIES
T GIS 502: Introduction to Geospatial Technologies
Thursday 5:20-9:20p.m.

Faculty: Jim Thatcher (he/him)
Office: PNK 213
Office Hours: **Tuesdays 3:30-4:30pm and *by appointment***
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COURSE DESCRIPTION

Geospatial technologies have come to play a pivotal role in almost every aspect of modern life – from how cities are built, to how governments function. Concepts such as ‘big data’ intersect with ‘smart’ urban growth and renewal plans on one level, while individual citizens make use of a variety of mobile, spatially-aware applications to navigate their day-to-day lives. Scholars have begun to examine the role of spatial information and technologies from a variety of directions – both utopic and more critical. Before turning to more technical work later in the Master’s program, this course lays the groundwork for thinking through research and applications in geospatial technologies.

Each week of the class will focus around one area of interest – such as ‘smart cities,’ ‘big data,’ ‘critical data studies,’ etc. – and discussions will be led by groups of students. Through the readings, students will gain an understanding of how geospatial technologies have and continue to function in society as well as the precise means by which they intersect with the daily lives of individuals, cities, and natural environments. From the readings and discussions, students will develop topic ideas for their Master’s projects to be completed throughout the course of the year. Students will be tasked with production an abstract and annotated bibliography for their M.S. projects that situates their own work within the broader understandings of technology presented in this course. Doing so prepares students to undertake their research not only from an empirically focused, but also theoretically informed perspective, highlighting the broader social, cultural, and historical trends that influence their own work.

COURSE OBJECTIVES

At the conclusion of the course, students will:

- Be able to read, summarize, and present professional and academic writing
- Be able to write at a professional level about the role of geospatial technologies in contemporary lived environments

- Gain an ability to ask critically informed questions about the intersection of individual, society, and technology as it plays out through digital devices and in urban spaces
- Have formulated an empirically based, theoretically informed research question that relates to geospatial technologies
- Written an abstract for their final Master's project in a professionally appropriate style

REQUIRED TEXTS

Over the course of the quarter, we will be reading articles, chapters, and several texts. The articles and chapters will be available on Canvas, the texts are as follows:

- o *New Lines* by Wilson
- o *New Dark Age* by Bridle
- o *If... Then* by Bucher
- o *All Data Are Local* by Loukissas
- o *Race After Technology* by Benjamin

TEACHING AND ASSESSMENT METHODS

The course will be based upon lectures, guest speakers, in-class discussions, weekly reading responses, student led discussions, participation, and a final assignment.

Grades will be based on preparation, participation, presentations, weekly responses, and a final assignment.

CANVAS AND UWT EMAIL REQUIRED

Canvas and your UW email account will be used extensively for communication, announcements, assignments, lecture notes, exchange of ideas, and feedback. Check your UW email and the Canvas workspace daily for updates. All written assignments will be typed, double-spaced, APA citation style and submitted electronically in a WORD compatible format via Canvas.

CLASSROOM PRINCIPLES

This course will cover a variety of difficulty topics in a limited amount of time. As such, students are expected to come to class prepared and to actively participate in class. Working with technology, it is impossible to fully resist periodically checking email or other outside communications; however, please be respectful of others. Loud typing or browsing of distracting websites (lots of images/videos) will not be tolerated.

Late assignments will be marked down. While attendance is not mandatory, if you are going to miss extended class time, please let me know beforehand. Ask other students for missed notes and check Canvas for lecture slides.

GRADING/EVALUATION CRITERIA

- | | |
|-----------------------------|---------------------|
| • Weekly reading responses | 30% of course grade |
| • Weekly reading discussion | 10% of course grade |
| • Weekly presentations | 30% of course grade |
| • Final project | 30% of course grade |
| Total: | 100% |

More information on the University of Washington's grading policies can be found here:

http://www.washington.edu/students/gencat/front/Grading_Sys.html

Participation: Students are expected to attend all class sessions and to actively participate in class exercises and discussions. This means coming to class prepared and having completed any reading or other assignments.

Weekly Responses: Five times over the course of the semester students will choose to submit a brief (single page) response to the assigned readings. These are due *and distributed to the class via Canvas* the day before the class. Therefore, if a student is submitting one of their responses for a class on Thursday, the response will be due Wednesday at 9:00 p.m. The instructor will distribute responses to the class the following morning. Students are expected to come to class having read the summaries as well as the assigned reading as together they will form the basis of discussion. (30% of grade)

Final Paper: DUE 12/12/2018 at 5:30 pm

The final project for this class consists of two components. First, the students will be required to write an abstract for a potential final project. Second, the students will provide an annotated bibliography for said project.

The abstract will be 250-300 words and will follow the format of a research article's abstract. Abstract writing, and a guide, will be provided during the course of the quarter.

The annotated bibliography will contain *at least* 15 references as well as a sentence or two summarizing why the article or book is appropriate to the project.

Students are encouraged to begin thinking about their project **as soon as possible**. Meeting with the instructor during office hours to discuss the project is also encouraged.

Additional details on both parts of the project will be covered in class. The topic selected by the students in this quarter is not required to be their final project.

Formatting: Papers must be typed in 11-12-point font, and double spaced with standard margins. References are to be properly and consistently cited using an accepted style (such as APA, MLA, etc.).

Plagiarism: using another's words or ideas without proper citation, is a conduct violation. Ignorance of proper documentation procedures is the usual cause of plagiarism, although it does not excuse the act. Students are responsible for learning how and when to document and attribute resources used in written or oral presentations. For more information, please refer to the Academic Honesty: Cheating and Plagiarism document adapted by the Nursing Program at UW Tacoma:

http://www.tacoma.washington.edu/nursing/current_students/honesty.cfm

Extra-credit opportunities, such as attending specific research lectures or other activities on Campus, may be announced during the quarter.

Reading note: Assigned readings are to be completed ***for the class under which they are listed***. Therefore, the readings under the October 3rd class are to be completed **by the start of that class**, and so on. No preparation is expected for the first class.

Articles will be available on **Canvas**.

There is required reading each week except the first.

COURSE OUTLINE

Week 1 - September 26th

Orientation: Course Introduction, discussion of program, etc.

Week 2 - October 3rd

GIS 1

Reading: Wilson, *New Lines*

Week 3 - October 10th

Spaces

Reading: Harvey, D. "Space as a key word"
Massey, D. "Power-geometry and a progressive sense of place"
Horvath, R. "Machine Space"
Pickren, G. "The global assemblage of digital flow"
Amoore, L. "Cloud geographies"

Week 4 - October 17th

Data

Reading: Loukissas, *All Data Are Local*

Week 5 - October 22nd - PLEASE NOTE, THIS IS A TUESDAY CLASS

Past & Abstract Writing

Reading: O'Sullivan, D., et al. "Spatiality, maps, and mathematics in critical human geography"
Benjamin, W. "The Work of Art in the Age of Its Technological Reproducibility"
Haraway, D. "A Cyborg Manifesto"
Nakamura, L. "Indigenous Circuits"
Pickles, J. "Representation in an Electronic Age"

Week 6 - October 31st

Present & Annotated Bibliographies

Reading: Bridle, *New Dark Age*

Week 7 - November 7th

GIS 2

Reading:

Sheppard, "GIS and Society: Towards a Research Agenda"
Guan, et al. "Evaluating the Geographic in GIS"
Warren, et al. "Commentaries on 'Evaluating the Geographic in GIS'"
Thatcher, et al. "Revisiting Critical GIS"
Schuurman, 2000. "Trouble in the heartland"

Week 8 - November 14th - NO CLASS

Algorhythm

Reading: Bucher, *If... Then*.
Amoore, L. "Doubt and the Algorithm"
Wark, M. "Information Wants To Be Free"

Week 9 - November 21th

Algorhythm

Reading: Bucher, *If... Then*.
Amoore, L. "Doubt and the Algorithm"
Wark, M. "Information Wants To Be Free"

Week 10 - November 28th - NO CLASS

Race

Reading: Benjamin, *Race After Technology*
Jefferson, "Policing, data, and power-geometry: intersections of crime analytics and race during urban restructuring"
Ricaurte, P. "Data Epistemologies, The Coloniality of Power, and Resistance"

Week 11 - December 5th

Race

Reading: Benjamin, *Race After Technology*
Jefferson, "Policing, data, and power-geometry:
intersections of crime analytics and race
during urban restructuring"
Ricaurte, P. "Data Epistemologies, The Coloniality of Power,
and Resistance"

THE FINAL PROJECT IS DUE BY 5:30 P.M. ON December 12th, 2018

INCLUSIVITY IN THE CLASSROOM

In this class, we will have the chance to indicate the name that we prefer to be called and, if we choose, to identify pronouns with which we would like to be addressed. This will be done confidentially through Canvas.

CAMPUS RESOURCES

Teaching and Learning Center - The Teaching and Learning Center (TLC) offers free academic support for students at all levels. For writing, reading, learning strategies and public speaking needs, please make an appointment online at: <http://uwttlc.mywconline.com/index.php>. Writing support is also available at our online writing center at: uwtwrite@u.washington.edu More information about our online writing center is available at: <http://www.tacoma.washington.edu/tlc/writing/onlinewritingcenter.cfm> For math, stats and quantitative needs, assistance is available on a drop-in basis in Snoqualmie 200. Please check our schedule at: <http://www.tacoma.washington.edu/tlc/math/schedule.cfm>. For special needs, please contact Ingrid Horakova at: horaki@u.washington.edu

Disabilities Accommodation - Disability Support Services (DSS) functions as the focal point for coordination of services for students with disabilities. In compliance with Title II of the Americans with Disabilities Act, any enrolled student at UW Tacoma who has an appropriately documented physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," is eligible for services from DSS. If you are wondering if you may be eligible for accommodations on our campus, please contact the DSS reception desk at 692-4522, or visit http://www.tacoma.washington.edu/studentaffairs/SHW/dss_about.cfm

Inclement Weather Policy: Call (253) 383-INFO or check the UW Tacoma homepage to determine whether campus operations have been suspended or delayed. If not, but driving conditions remain problematic; call the professor's office number (692-4761) and/or check Catalyst announcements. If the first two numbers have been contacted and the student is still unable

to determine whether class will be held, call the Urban Studies program office number 692-5880 for updated information.

Religious Accommodations: Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy \(https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/\)](https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request form \(https://registrar.washington.edu/students/religious-accommodations-request/\)](https://registrar.washington.edu/students/religious-accommodations-request/).