**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:** **Thursdays 3-5pm and *by appointment***
**Email:** jethatch@uw.edu


**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:

- *Code + Clay … Data + Dirt* by Shannon Mattern
- *Program Earth* by Jennifer Gabrys
- *Telesthesia* by McKenzie Wark
- *Radical Technologies* by Adam Greenfield
- *Machine Learners* by Adrian Mackenzie

**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**

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|---|---|
| • 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 12/13/2015 at 5:00 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 6th 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 27th**

Course Introduction, discussion of program, etc.

**Week 2 – October 4th**

Dirt

**Reading:** Mattern, S. *Code + Clay … Data + Dirt*

**Week 3 – October 11th**

Cloud

**Reading:** Amoore, L. "Cloud geographies"
Burrington, I. "The Cloud Is Not the Territory"
Mattern, S. "Cloud and Field"
Milan, S. "The Materiality of Clouds"
Pickren, G. "The global assemblage of digital flow"

**Week 4 – October 16th – PLEASE NOTE THIS IS A TUESDAY CLASS**

Body

**Reading:** Nakamura, L. "Indigenous Circuits"
Jefferson, B J. "Digitize and punish"
Gregory, D. "From a View to Kill"
Wilmott, C. "Small moments in spatial big data"
Elwood, S. and Leszczynski, A. "Feminist digital geographies"

**Week 5 – October 25th**

Planet

**Reading:** Gabrys, J. *Program Earth*

**Week 6 – October 30st – PLEASE NOTE, THIS IS A TUESDAY CLASS**

Past & **Annotated Bibliographies**

**Reading:** Benjamin, W. "The Work of Art in the Age of Its Technological Reproducibility"
Kittler, F. "There is No Software"
Gandy, O. "Toward a political economy of personal information"
Haraway, D. "A Cyborg Manifesto"
O'sullivan, D. et al. "Spatiality, maps, and mathematics in critical human geography"

**Week 7 – November 8th**

Present

**Reading:** Mackenzie, A. *Machine Learners*.

**Week 8 – November 15th**

Perception
**Reading:** Wark, M. *Telesthesia*.

**Week 9 – November 22th**
**NO CLASS**
**Reading:** Greenfield, A. *Radical Technologies*
Bratton, B. "The Black Stack"

**Week 10 – November 29th**
Design
**Reading:** Greenfield, A. *Radical Technologies*
Bratton, B. "The Black Stack"

**Week 11 – December 6th**
Resistance?
**Reading:** Ettlinger, N. "Algorithmic affordances for productive resistance"
Swanland, D. and Schuurman, N. "Resisting geosurveillance"
Nafus, D. "Stuck, data, dead data, and disloyal data"
Dalton, C. "Counter-mapping data science"
Thatcher, J. "Looking Back to Detroit"
Deleuze, G. "Postscript on the Societies of Control"
Wark, M. "Information Wants To Be Free"

**THE FINAL PROJECT IS DUE BY 5 P.M. ON December 11th, 2017**

**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.