### GTECH 38502/GTECH 78502/EES 79903 GIS APPLICATIONS IN SOCIAL GEOGRAPHY BACK TO MP HOME PAGE



# GIS APPLICATIONS IN SOCIAL GEOGRAPHY (NICKNAMED GISSG AND GIS FOR SOCIAL JUSTICE) FALL 2017

THURSDAYS 2:10-5PM ROOM HN 1090B

Instructor: Office location: Office hours: Email: BlackBoard login page: Course webpage:

Dr. Marianna Pavlovskaya HN 1003F Tuesday 14:15-15:15 and by appointment mpavlovAThunter.cuny.edu (Please see <u>Email rules</u>) <u>http://bb.hunter.cuny.edu</u> <u>http://www.geo.hunter.cuny.edu/~mpavlov/Courses/GisSG/GisSGHome.html</u>

### **COURSE DESCRIPTION**

This is a 3-credit course. GTECH 38502 counts for undergraduate Geography and/or ES majors. GTECH 78502 counts as an elective for our GIS certificate program. EES 79903 counts towards the program credits.

The GIS Applications in Social Geography examines how GIS can be used for critical analysis of spatial configurations of social power including economic, racial, gender, and other inequalities. It also explores how GIS can assist in imagining social alternatives and creating social spaces that aspire to social justice. After reviewing some basic GIS analytical techniques, we will work on team projects in close contact with a grass-roots organization, NGO, or research group concerned with issues of social justice. Other types of projects are also possible. The precise content of the projects will be determined in the first two weeks of the semester. Hands-on GIS experience will be combined with extensive readings, class discussions, and presentations by invited speakers.

#### COURSE OBJECTIVES AND LEARNING OUTCOMES

Upon completion of this course students will (1) learn about the role of GIS as a tool for grassroots advocacy and social change; (2) understand the power-laden and socially constructed nature of geo-spatial technologies; (3) gain first-hand experience of being a GIS expert working with a community organization or an NGO in order to address their GIS research and representational needs. In addition, the students will acquire skills for (4) teamwork GIS project, (5) designing and implementing a GIS project; (6) disseminating the results of a GIS project.

### **COURSE CONTENT**

Class sessions will consist of lectures, class discussions of readings and projects in progress, and lab work. **Competency exercises** are optional because all students have already taken introductory GIS courses. They will guide you step by step through the problem to a solution. Complementary to the lectures, competency exercises will review the spatial analysis concepts and the software tools needed for Mastery exercises and the projects. **Mastery exercises** are designed to strengthen your ability to conduct the GIS analysis independently. They will build upon the concepts covered in class and competency exercises. Each mastery exercise consists of a data set and a problem to be solved. The steps to solving the problem will not be given but should be developed by each student. A cartographic model, a screenshot of the final output, and a brief report detailing the procedures used to solve the problem will be required for each mastery exercise.

**Reports on assigned readings** will be 1-2 page long. They are not intended to summarize the readings but demonstrate your engagement with the content. Groups of students will present readings to the class. **Internet research assignments** will include, for example, a critique of a map you found on the internet. Due dates will be posted in GIS SG course schedule on BlackBoard (BB).

**Project** is a team project that a group of students will complete in cooperation with a grassroots organization, a group of community researchers, or an NGO working on social justice issues. Together, we will formulate a

research problem, define the tasks, data collection strategies, analytical techniques, and write a report. In the end of the semester, each team will present the results to the class and to its partner organization.

**Graduate students will also write an essay** about the social impacts of GIS technologies and make a brief presentation to the class. The essay should discuss at least three articles on the topic that we agree upon.

### BOOKS, TUTORIALS, AND SOFTWARE

Since the class assumes basic familiarity with GIS software and analysis, the texts below are recommended. The required class readings on social impacts of GIS will be available on e-reserve.

### **Recommended textbooks:**

- An Introduction to Geographical Information Systems by Heywood et al., 2007.
- IDRISI Andes Guide to GIS and Image Processing, April 2006, by J. Ronald Eastman. Clark Labs, Clark University. Available digitally on lab computers.

**Tutorial exercises** are available digitally on lab computers and course blackboard (BB). Their content and due dates will be posted on BB.

**Software packages** used in class: Quantum GIS (QGIS), Idrisi (developed by Clark Labs at Clark University, Worcester, MA), and ArcGIS (developed by ESRI). Students can use these or other software packages with which they have become familiar in introductory classes. They are available on all lab computers at the department. Low cost student versions of Idrisi are available from Clark Labs. Visit http://www.clarklabs.org/ or call Clark Labs at (508) 793-7526 for details.

### STUDENT EVALUATION

The final grade is based upon your grades for exercises (e.g., extra-credit competency exercises, mastery exercises, reports on the readings, and internet research assignments), class participation, and the project. Grades will be assigned on a fixed scale following Hunter College Guidelines. Competency exercises can be done individually or in groups for the same credit. In the latter case please hand in one copy signed by all group members. Mastery exercises must be done individually.

Undergraduate students		Graduate students	
Exercises and assignments	60%	Exercises and assignments	45%
Class participation	10%	Class participation	10%
Project	30%	Project	30%
		Essay	15%
Total	100%	Total	100%

**LATE ASSIGNMENTS** will be marked down. Exercises will not be accepted after the answers were handed out. **NO LATE ARRIVALS PLEASE.** Three late arrivals or two missed classes result in one point less from your class participation grade.

#### **CREDIT/NO CREDIT REQUIREMENTS**

The requirements for CR/NC for a final grade are as follows. A student who requests CR/NC must have completed all of the requirements for the course, including taking the final exam. That includes all writing assignments, all quizzes, exams, lab work, assignments, etc., prior to the end of the semester. The student must present the CR/NC form BEFORE the final exam begins, not during, not after. Both the student and the instructor sign the form and each keeps their copy. Forms are available at OASIS. Students on probation are not eligible for CR/NC. Students are allowed only four (4) CR/NC for their entire Hunter career.

### WRITING AND READING ASSISTANCE

All written assignments must be proofread for standard English otherwise they will be marked down. The Hunter College Reading and Writing Center provides students with tutoring and help services across the disciplines and at all academic levels. Students who need assistance can be directed to http://rwc.hunter.cuny.edu or sent to Room 416 Thomas Hunter Hall, telephone 212-772-4212. These services are free to registered students.

Top of page

### EMAIL RULES

Email is a major way to get in touch outside my office hours. The rules for contacting me via email are as follows: (1) please include GISSG in your subject line; (2) please sign your full name, I will not be able to answer unsigned email messages or (3) I usually answer within one or two days except for the weekends.

### HUNTER COLLEGE STATEMENT ON ACADEMIC INTEGRITY

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures. Plagiarism, dishonesty, or cheating in any portion of the work required for this course will be punished to the full extent allowed according to Hunter College regulations.

### HUNTER COLLEGE ADA COMPLIANCE

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772-4857 or (212) 650-3230. Please notify the instructor what kind of arrangements you need to complete the coursework.

### LAB RULES

Please read carefully Lab Rules and regulations <u>http://www.geography.hunter.cuny.edu/techsupport/rules.html</u>. General info about lab accounts and the labs <u>http://www.geography.hunter.cuny.edu/techsupport/spars.html</u>. On-line technical help http://www.geography.hunter.cuny.edu/techsupport/index.html.

With questions about assignments and other course content please contact me. For problems with operating systems, logins, and all applications but GIS software contact Department's Windows systems administrator Nguyen Ngoc Nguyen (nngoc@hunter.cuny.edu). For problems with swiping cards, GIS software, and printing contact our College Laboratory Technician (CLT) Amy Jeu (ajeu@hunter.cuny.edu).

# **BLACKBOARD (BB) LOGINS**

All communication regarding the course including the assignments, grades, and due dates as well as group emails will be via BlackBoard. In order to log in on BB you must have a CUNY portal account. All students enrolled in Hunter courses can establish this account by following the instructions on BB page (bb.hunter.cuny.edu). If you cannot see this class in your BB account, contact BB help (see its webpage).

# HUNTER COLLEGE POLICY ON SEXUAL MISCONDUCT

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

- a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, or contacting the College's Public Safety Office (212-772-4444).
- b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link: <u>http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf</u>.

# ACADEMIC CALENDAR FOR FALL 2017 AND WEEKLY TOPICS

Th, Aug 31	First class meeting	
Tu, Sep 19	Class meets, Thursday schedule	
Th, Sep 21	No class	
Th, Nov 23	No class	
Th, Dec 12	Last class	
Finals week	Project presentations	

# WEEKLY SCHEDULE IS SUBJECT TO CHANGE. DETAILS POSTED ON BB.

### Weeks Topics

- 1 Introduction and logistics
- 2 GIS tools and means
- 3 GIS tools and means
- 4 Critical GIS: Debates and issues
- 5 GIS tools and means. Finalization of project teams and community partners
- 6 Critical cartography and counter-mapping
- 7 Cartography, GIS, surveillance, and empire
- 8 Qualitative and quantitative GIS
- 9 Feminism and GIS
- 10 Internet cartography and GIS
- 11 Project updates
- 12 Project updates
- 13 Project updates
- 14 Project presentations
- Finals Project presentations

week