MATH 14F, The Mathematics of Elections: Fall 2018 A quick reference guide

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Office hours: Mondays, 11:30 a.m.-1:30 p.m. and Wednesdays, 9:00-11:00 a.m.

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Semi-official course description: How do we decide when a way to divide voters into congressional districts results in unfair representation (gerrymandering)? And, once we've established these districts, how do we decide which candidate wins? We'll spend the semester talking about different voting systems that are used to choose the winner of an election and ways to measure the fairness of redistricting methods.

Text: The Mathematics of Voting and Elections: A Hands-On Approach by Hodge and Klima and other readings (to be listed on Blackboard)

Classroom and time: Gallon Wing 13, TR 2:20–3:45 p.m.

Grading scheme:

• Homework: 35%

• Midterm (October 25): 15%

Final exam: 25%Final project: 25%

Homework will be assigned weekly. In general, the problems will be due on Tuesdays at the beginning of class and cover the material discussed in the previous week. While the exams will be done individually, homework is to be done in groups of 3 to 5. For each homework assignment, your group will turn in just one solution set, signed by all members who participated in the work. You should complete the assignment and sign it during a group work session outside of class. Each group must make sure their homework assignment is submitted on time. The lowest homework score for each student will be dropped regardless.

Details on the final project will be provided later.

There will be one midterm and a comprehensive final exam in this class. The final exam is tentatively scheduled for 1:30 p.m. on Thursday, December 13. You must be available to take your final exam at this time unless you have a documented emergency or unless you make alternate arrangements with me by November 27. Note that I will only make these arrangements in the event of extenuating circumstances beyond your control.

Calculator policy: You are allowed to use any calculator you like on exams as long as it isn't a graphing calculator. You can use any kind of calculator you like when you do the homework, but I urge you not to rely on a graphing calculator heavily since you won't be able to use it on the exams.

Academic Honesty: You are expected to follow the Hofstra University Honor Code at all times. All forms of academic dishonesty are serious ethical and professional infractions. Hofstra's policy on academic honesty reads: "The academic community assumes that work of any kind [...] is done, entirely and without unauthorized assistance, by and only for the individual(s) whose name(s) it bears." See the "Procedure for Handling Violations of Academic Honesty by Undergraduate Students at Hofstra University"

(http://www.hofstra.edu/pdf/Faculty/Senate/senate_FPS_11.pdf) for a detailed discussion of dishonesty and Hofstra's procedures for handling violations. Violations will be reported.

While your homework assignments are to be done in groups, I expect each member of a group to be actively involved in all phases of doing the assignment: organizing group meetings, reading over the problems before the meetings and thinking about them, working out the solutions, and writing up the solutions and reviewing the other group members' work. A good rule of thumb is that every group member should be able to explain the group's solution to every problem.

Accessibility Issues: If you believe you need accommodations for a disability, please contact Student Access Services (SAS). In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, qualified individuals with disabilities will not be discriminated against in any programs or services available at Hofstra University. Individuals with disabilities are entitled to accommodations designed to facilitate full access to all programs and services. SAS is responsible for coordinating disability-related accommodations and will provide students with documented disabilities accommodation letters as appropriate. Since accommodations may require early planning and are not retroactive, please contact SAS as soon as possible. All students are responsible for providing accommodation letters to each instructor and for discussing with him or her the specific accommodations needed and how they can be best implemented in each course.

For more information on services provided by the university and for submission of documentation, please contact Student Access Services, 107 Student Center, (516) 463-7075.

Religious observances: If you have a religious obligation that conflicts with your participation in the course, you are responsible for notifying me far enough in advance for us to discuss your situation and agree on accommodations. Note that all students are responsible for completing all the work for the course. For more information, see Part II(B) of "Academic Freedom and Civil Liberties of Students at Hofstra University"

(http://www.hofstra.edu/PDF/Faculty/Senate/senate_FPS_12.pdf).

Discriminatory harassment, relationship violence, and sexual misconduct:

Hofstra prohibits sexual and other discriminatory harassment, stalking, domestic and dating violence, sexual assault and other sexual misconduct. If you or someone you know believes they have been subjected to any of these offenses, help is available. To make a report, or for more information about Hofstra's Student Policy Prohibiting Discriminatory Harassment, Relationship Violence, and Sexual Misconduct (for more information, see

http://hofstra.edu/sexualmisconduct), please contact the Title IX Officer for Student Issues at (516) 463-5841 or StudentTitleIX@hofstra.edu or Public Safety at (516) 463-6606.

Confidential resources and support are also available from medical and counseling professionals in the Student Health and Counseling Center at (516) 463-6745) and clergy in the Interfaith Center.