XIDS 2002 (Section E01): the Mathematics behind Voting
Fall 2018

Textbook: Excursions in Modern Mathematics, 9th Edition
by Peter Tannenbaum (Pearson Education)

Instructor: Dr. Xiaofeng Gu (xgu@westga.edu)
Office: Boyd 316; Phone: (678) 839-4143
Office Hours: MW 9-10am at MTC(Boyd 205), 10-11am; F 9-10am
Course Website: CourseDen and MyMathLab

MyMathLab: All students are required to have a MyMathLab account (www.MyMathLab.com). An e-textbook is available in your account. The hard copy of the textbook is not required. The course code for this section is gu36663. See attached registration instruction.

1 Courses Description

XIDS 2002 is a course designed to help students get excited about learning at West Georgia. In addition, it is our hope that this course helps you succeed academically as well as personally and socially during this semester and beyond. The fundamental focus of the class is to provide an understanding of the basic structure of critical thinking and of academic disciplines in order to increase learning in the university classroom. Students are required to attend class and to interact with their instructors and classmates. While students must take responsibility for their own learning, the course attempts to support and enhance that responsibility by making the class a learning community within the University.

This section focuses on voting theory. In many decision making situations, voters need to make a decision between several options. This happens in everyday life; it happens in business; and it happens in politics, etc. The main goal of voting is to reflect the preferences of voters in the fairest way possible. This seminar aims to introduce mathematical theory of voting, including voting methods and fairness criteria, as well as some other contemporary mathematical applications.

2 Learning Outcomes

As a result of participating in this course, students should be able to:

- adapt written and oral communication to specific rhetorical purposes and audiences.
- recognize and begin to implement the skills necessary to become life-long, active learners through the exploration of an academic topic that focuses on a contemporary and/or enduring topic, question, or problem.
- identify, evaluate, and use information, language, or technology appropriate to a specific purpose.

3 Grading and Evaluation

Homework: 25%. Online in MyMathLab. There are unlimited attempts for each homework assignment.
Two Tests: totally 30%. Online in MyMathLab. There is only one attempt for each test.
Final Exam: 20%. Online in MyMathLab, with only one attempt. The final exam is cumulative.
Writing Assignment: 10%. (See attached for more information.)
Wolf Experience Activities: totally 15%. (See attached for more information.)
4 Policies

Assignments: All assignments must be completed by the deadlines. Please follow the calendar in the MyMathLab and CourseDen.

Communication: Since this is an online course, my main communication to you is via email. You can also come to my office during the office hours to meet me. For other time to meet me, you need to send me an email to set up an appointment.

University Policies and Academic Support: For important policy information, i.e., the UWG Honor Code, Email, and Credit Hour policies, as well as information on Academic Support, Online Courses and Campus Carry, etc, please review the Common Language for Course Syllabi: https://www.westga.edu/UWGSyllabusPolicies/. You should read this at the beginning of each semester.

5 Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 15</td>
<td>classes begin</td>
</tr>
<tr>
<td>September 3</td>
<td>Labor Day Holiday (no classes)</td>
</tr>
<tr>
<td>September 29</td>
<td>Last day to withdraw with a grade of W</td>
</tr>
<tr>
<td>October 4-5</td>
<td>Fall Break (no classes)</td>
</tr>
<tr>
<td>November 19-23</td>
<td>Thanksgiving Holiday (no classes)</td>
</tr>
<tr>
<td>December 7</td>
<td>Last day of class</td>
</tr>
</tbody>
</table>

The instructor retains the right to modify this syllabus to better serve the course objectives.