2014

MATH 115-19 Topics in Applied Mathematics

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MATH 115-19, TOPICS IN APPLIED MATHEMATICS

Term #5 May 18-July 26 Smith 252 8:30 AM-Noon

Pre-Assignment: Sunday, May 18, 12:00-2:00 PM (Required)
No class meeting on May 24 and July 5

Instructor Jack Butz  Office: Hinkle 131
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Phone: 745-3516

Assistant Nathan Mollohan  EMAIL: mollohann@xavier.edu
Phone: (937) 974-1927

Textbook Tannenbaum, Peter  *Excursions in Modern Mathematics*, 7th Edition

Calculator Each student should have a scientific calculator.

Grading/Attendance

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100</td>
<td>The grade is determined as follows:</td>
</tr>
<tr>
<td>A-</td>
<td>91-93</td>
<td>Test Average 75% (25% per test)</td>
</tr>
<tr>
<td>B+</td>
<td>88-90</td>
<td>Assignments 25%</td>
</tr>
<tr>
<td>B</td>
<td>85-87</td>
<td>Attendance—or lack of—is used in</td>
</tr>
<tr>
<td>B-</td>
<td>82-84</td>
<td>determining borderline grades.</td>
</tr>
<tr>
<td>C+</td>
<td>79-81</td>
<td>Be advised that I do not give “extra credit”</td>
</tr>
<tr>
<td>C</td>
<td>75-78</td>
<td>work. Opportunities for grade enhancement</td>
</tr>
<tr>
<td>C-</td>
<td>72-74</td>
<td>will often be included on the tests and/or</td>
</tr>
<tr>
<td>D+</td>
<td>69-71</td>
<td>assignments. You are permitted the</td>
</tr>
<tr>
<td>D</td>
<td>66-68</td>
<td>equivalent of one absence—210 minutes.</td>
</tr>
<tr>
<td>D-</td>
<td>60-65</td>
<td>If you exceed the limit of 210 your grade</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
<td>drops one full letter. Exceeding two full</td>
</tr>
<tr>
<td></td>
<td></td>
<td>classes is grounds for removal from class.</td>
</tr>
</tbody>
</table>

Tests June 21, July 12 & 26 Please keep June 22 and July 13 available in case of an emergency cancellation of class.

Objectives From the XU Catalog Xavier University’s admission requirement of two units of high school mathematics is *assumed* (my emphasis) for all mathematics courses. 3 Cr. Hrs: TOPICS IN APPLIED MATHEMATICS. The mathematics of Social Change, Management Science, and Growth will be studied.

Tutorial Sessions Our GA, Nathan, will be available on Thursday evenings from 5:30-7:30 PM to meet with students needing assistance with course material. You are neither required to stay the entire time nor to be in attendance right at 5:30 PM. Start-up date is June 5 in Cohen 107. You must call or email him by noon on each Thursday to let him know that you will attend that evening.
Test Make-Up

Mr. Butz will give you a make-up test if you are absent from a scheduled test if and only if you follow this procedure. If you foresee an absence from a test, then see Mr. Butz beforehand, email him, or call him at the phone number listed above. If you miss a test for some other reason, you must contact Mr. Butz within seventy-two hours of the missed test. He is final judge as to what is an acceptable excuse and reserves the right to see documentation verifying your reasons for missing the test. *If you do not follow this simple procedure, Mr. Butz will assign to you the grade of zero for that test.* If your absence is excused, then Mr. Butz will work with you to set up a make-up time. The test must be made up by the next class. Calling the Weekend Degree Office or the GA does not relieve you of the responsibility of contacting Mr. Butz.

MATERIAL TO BE COVERED

Problems are assigned “as we go.”

Handouts will be given out that you will turn in for a grade.

CHAPTER ONE
THE MATHEMATICS OF VOTING

CHAPTER TWO
THE MATHEMATICS OF POWER

CHAPTER THREE
THE MATHEMATICS OF SHARING

CHAPTER FOUR
THE MATHEMATICS OF APPORTIONMENT

CHAPTER FIVE
THE MATHEMATICS OF GETTING AROUND

CHAPTER SIX
THE MATHEMATICS OF TOURING

CHAPTER SEVEN
THE MATHEMATICS OF NETWORKS

CHAPTER NINE
THE MATHEMATICS OF SPIRAL GROWTH IN NATURE

CHAPTER TEN
THE MATHEMATICS OF MONEY

Addendum

The instructor reserves the right to modify procedures, change dates, etc. at any time except for items under “grading.” Any changes will be given to you at the beginning of class. Since most announcements are made at the start of class, it is important for you to be punctual. *At the Pre-Assignment, you will be told how your homework is to be done, how it will be graded, and when it must be turned in to the GA.* If you miss class, you are to contact the GA regarding assignments, material covered, etc. Homework is due when it is due. There is a one week grace period. After that time, homework receives no credit. *Keep in mind that homework is 25% of your grade.*

Cell Phones / Classroom Etiquette

Please turn your cell phone off during class. If you use it at break, remember to turn it off again before class resumes. Do not leave class to take a call unless you have cleared it with Mr. Butz in advance. He takes a very dim view of texting or reading text messages during class. Do not leave class in the middle of the lecture except for an emergency. Please leave your work station clean and tidy.