Course Title: Methods of Finite Mathematics

Course Number and Section: MATH 1228A - 551

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Disclaimer: Information in the brief course outline is subject to change. The syllabus posted on OWL is the official and authoritative source of information for the course.

Course Description:
Topics covered include techniques of counting, probability, discrete and continuous random variables.

Learning Outcomes:
- Use the methods of finite mathematics to solve complex and novel problems
- Communicate and use the language of mathematics relevant to the course effectively
- Determine the number of possible combinations for a given situation using the different counting techniques such as counting trees, permutations, combinations, etc.
- Demonstrate working knowledge of the concept of sample spaces and be able to identify appropriate sample spaces for probability situations.
- Determine the probability of events using different tools such as equiprobable sample spaces, probability trees, Bayes’ theorem, etc.
- Use probability distribution functions and cumulative distribution functions of continuous and discrete random variables to compute the probabilities of events defined by the random variables.
- Use continuous random variables to approximate the probability of events defined by discrete random variables.

Textbooks and Course Materials:
The material for this course will be presented online through the course OWL site.

Methods of Evaluation:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date mm/dd/yy</th>
<th>Weight - %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment</td>
<td>10/27/2023</td>
<td>35</td>
</tr>
<tr>
<td>Final exam</td>
<td>Dec. TBD</td>
<td>40</td>
</tr>
<tr>
<td>Online Quizzes (weekly)</td>
<td>Ongoing</td>
<td>20</td>
</tr>
<tr>
<td>Assignment</td>
<td>Due Date mm/dd/yy</td>
<td>Weight - %</td>
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<tr>
<td>Best assignment and final exam</td>
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<td>5</td>
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In solidarity with the Anishinaabe, Haudenosaunee, Luínapéewak, and Chonnonton peoples on whose traditional treaty and unceded territories this course is shared.