Course Description: This is an introductory course to the discrete structures used in computer and information technology. Emphasis will be placed on the ability to solve problems and develop logic thinking and reasoning. Topics including sequence, logic, set, function, elementary combinatorics and probability will be covered through the use of algorithmic and concrete construction. There is not prerequisite.


Topics:
- Set: definition, set operations
- Sequence
- Logic
- Relation
- Function
- Counting
- Introduction to discrete probability

Instructor: Dr. Xiaolan Zhang

- Email: xzhang at fordham.edu
- Office hours: TBA, JMH340A

Policy:

- **Expectation**: Attendance is mandatory. Students are expected to spend three to five hours outside of the lecture in the assigned reading, homework and lab projects.

- **Assignments**: Please turn in a hardcopy of the homework on the due date of the assignment. For computer project, the submission method is described in the project description. Assignments turned in late will be penalized, and no submission is accepted three days after its due date (you need to obtain approval for extension from the instructor, for reasons such as illness, heavy workload or other reasons). The maximum number of extensions is three.

- **Academic Integrity**: You should only hand in your own work for assignments (written or programming). Copying solutions from others, or from the Web will be penalized as violation of academic integrity. Equally important, you should not let other students copy your solutions to assignments. Please refer to the University's policy on Academic Integrity at here (https://www.fordham.edu/info/25380/undergraduate_academic_integrity_policy).

Grading Criteria: Final grade is based on the weighted sum of the following course works.

The mapping from number grade to letter grade is as follows:

A:100-90, B:90-80, C:80-70, D:70-60, F:60-0

<table>
<thead>
<tr>
<th>Component</th>
<th>num. of assignment</th>
<th>weight</th>
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<tbody>
<tr>
<td>Lab Projects</td>
<td>2 to 3 total</td>
<td>10%</td>
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<tr>
<td>Written Assignments</td>
<td>6-7</td>
<td>40%</td>
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<tr>
<td>Quizzes</td>
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<td>Class Participation</td>
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<tr>
<td>Midterm</td>
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<td>Final Exam</td>
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