INF1003 Mathematics I

Module Information

Module Lead

Dr. Nicholas Wong
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Co-module Lead

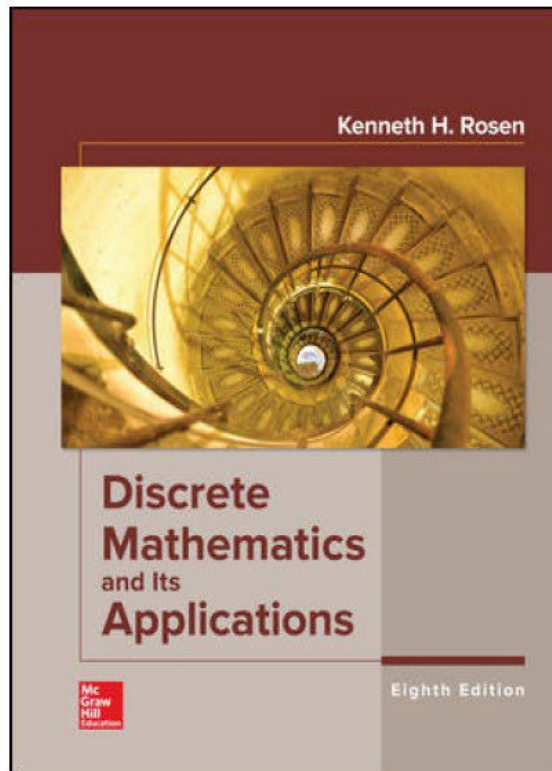**Dr. Purnima M Mohan**
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THE MATH QUEST:

Did you complete the quest?

Begin your Quest for Success

Reference Text

Mc Graw Hill Education

Discrete Mathematics and Its Applications

Kenneth H. Rosen

Edition: 8
2019©
ISBN-13: 9781259676512

CONTENT AVAILABLE IN:

CONNECT WITH LEARNSMART (SPARK): Access Card 9781259731242, 9781260519778; eCommerce 9781259731259

Create your own - www.mcgrawhillcreate.com

Tentative time-table for first half of trimester

Week	Starting	Topics
1	28 Aug	**Topic 1: Propositional Logic** Release tutorial topic 1 questions to students Students solve tutorial 1 and submit attempts before Thu, 31st Aug *Tutorial Class: No tutorial class for week 1*
2	4 Sept	**Topic 2: Predicate Logic & Quantifiers** Release tutorial topic 2 questions to students Students solve tutorial 2 and submit attempts before Thu, 7th Sep *Tutorial Class: F2F Tutorial discussion for Topic 1 tutorial submissions*
3	11 Sept	**Topic 3: Rules of Inference** Release tutorial topic 3 questions to students Students solve tutorial 3 and submit attempts before Thu, 14th Sep *Tutorial Class: F2F Tutorial discussion for Topic 2 tutorial submissions*
4	18 Sept	**Topic 4: Methods of Proof** Release tutorial topic 4 questions to students Students solve tutorial 4 and submit attempts before Thu, 21st Sep *Tutorial Class: F2F Tutorial discussion for Topic 3 tutorial submissions*
5	25 Sept	**Topic 5: Sets** *Quiz 1 (18%) – Topics: Topic 1, Topic 2, Topic 3* Release tutorial topic 5 questions to students Students solve tutorial 5 and submit attempts before Thu, 28th Sep *Tutorial Class: F2F Tutorial discussion for Topic 4 tutorial submissions*
6	2 Oct	**Topic 6: Functions** Release tutorial topic 6 questions to students Students solve tutorial 6 and submit attempts before Thu, 5th Oct *Tutorial Class: F2F Tutorial discussion for Topic 5 tutorial submissions*
7	9 Oct	**Recess Week**
8	16 Oct	**Topic 7: Sequences and Summation** *Quiz 2 (10%) – Topics: Topic 4, Topic 5* Release tutorial topic 7 questions to students Students solve tutorial 7 and submit attempts before Thu, 19th Oct *Tutorial Class: F2F Tutorial discussion for Topic 6 tutorial submissions*

Tentative time-table for second half of trimester

8	16 Oct	Topic 7: Sequences and Summation Quiz 2 (10%) – Topics: Topic 4, Topic 5 Release tutorial topic 7 questions to students Students solve tutorial 7 and submit attempts before Thu, 19th Oct Tutorial Class: F2F Tutorial discussion for Topic 6 tutorial submissions

9	23 Oct	Topic 8: Divisibility and Modular Arithmetic Primes and GCD Release tutorial topic 8 questions to students Students solve tutorial 8 and submit attempts before Thu, 26th Oct Tutorial Class: F2F Tutorial discussion for Topic 7 tutorial submission
10	30 Oct	Topic 9: Mathematical Induction Release tutorial topic 9 questions to students Students solve tutorial 9 and submit attempts before Thu, 2nd Nov Tutorial Class: F2F Tutorial discussion for Topic 8 tutorial submission
11	6 Nov	Topic 10: Basic of Counting, Permutation, Combination, Pigeonhole Principle Release tutorial topic 10 questions to students Students solve tutorial 10 and submit attempts before Thu, 9th Nov Tutorial Class: F2F Tutorial discussion for Topic 9 tutorial submission
12	13 Nov	Topic 11: Guest Lecture/Special Topics | Discrete Mathematics & PythonProgramming Quiz 3 (17%) – Topics: Lectures 7 – 9 (20%) Tutorial Class: F2F Tutorial iscussion for Topic 10 tutorial submission
13	20 Nov	Study/Consultation Week
14	27 Nov	Exam Weeks

Assessments Info

	Assessment Modes	Weightage	Assessment Dates
1.	Tutorials (2.5% + 2.5%)	5%	Weekly (every Thursday)
2.	Quiz 1	18%	25th Sep
3.	Quiz 2	10%	16th Oct
4.	Quiz 3	17%	13th Nov
5.	Final Written Exam	50%	TBA
	Total	**100%**	

"There are 10 types of people in the world:
Those who understand binary and those who don't."

Which one do you think you are?

Mathematical joke

From Wikipedia, the free encyclopedia

Some find it easier to exercise in groups.

Others don't.

LEARNING MATHEMATICS

Some like to take small steps, one at a time.

Others don't.

78 Feet

Singles Sideline

Doubles Sideline

Base Line

Left Service Box

Right Service Box

Service Line

Centre Line

Right Service Box

Left Service Box

36 Feet

Doubles Alleyway
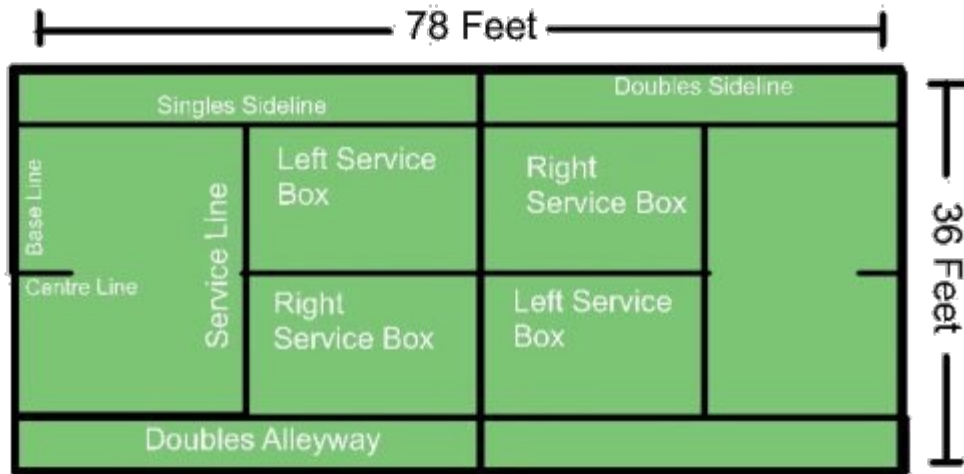
Knowing the rules of tennis well

is **not the same** as

Playing tennis well.

Image sources: http://www.sporting-central.com/tennis-rules.html
http://cdn.bleacherreport.net/images_root/slides/photos/002/552/684/hi-res-150846297_crop_650x440.jpg?1346340188

FINAL ADVICE FOR TODAY

Image sources: http://www.freeimages.com/assets/182993/1829929505/a-hand-writing-875404-m.jpg

Take your own notes
and
Write your own solutions!

(Practice. Don't watch others practice)

only

Especially in Tutorial Classes

1. Cross verify your answers against the tutorial class discussions
2. Make sure you have noted down the solutions for all
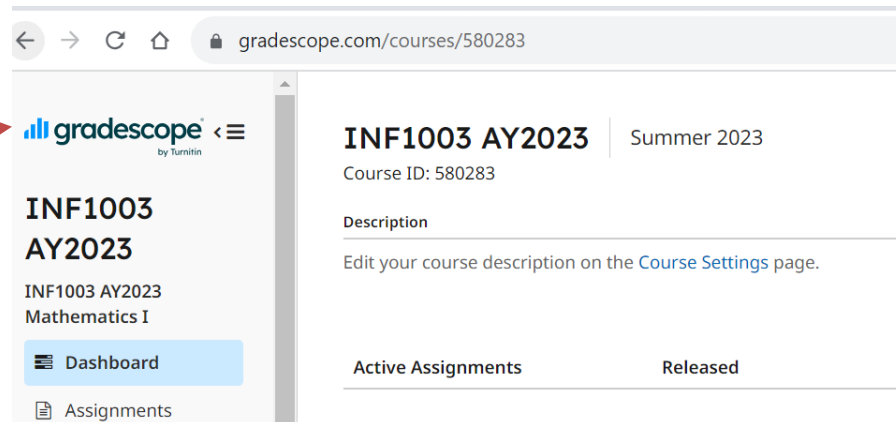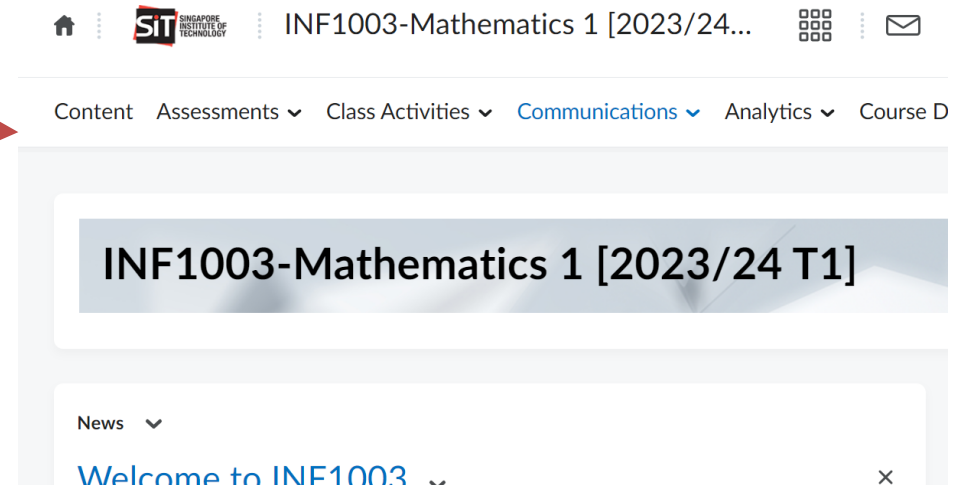3. Make sure you have clarified any doubts

HOW **ARE** WE **GOING TO LEARN?**

Content
Interactive online lectures
Short videos (to see before lecture)
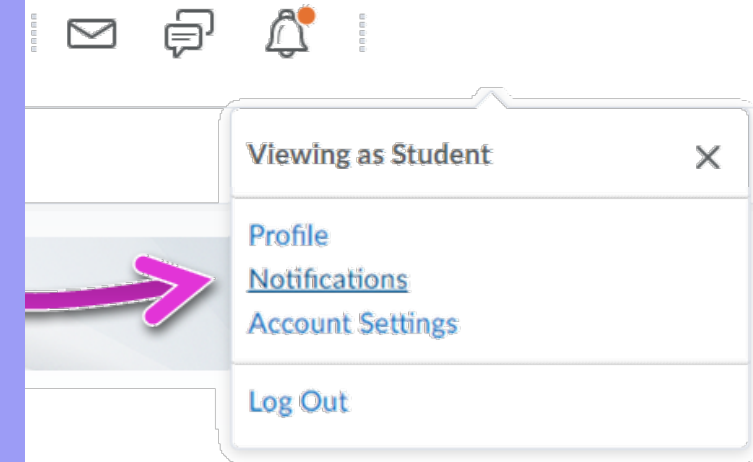
Live Discussions
Live zoom online discussions

Tutorial
Solving tutorial exercise
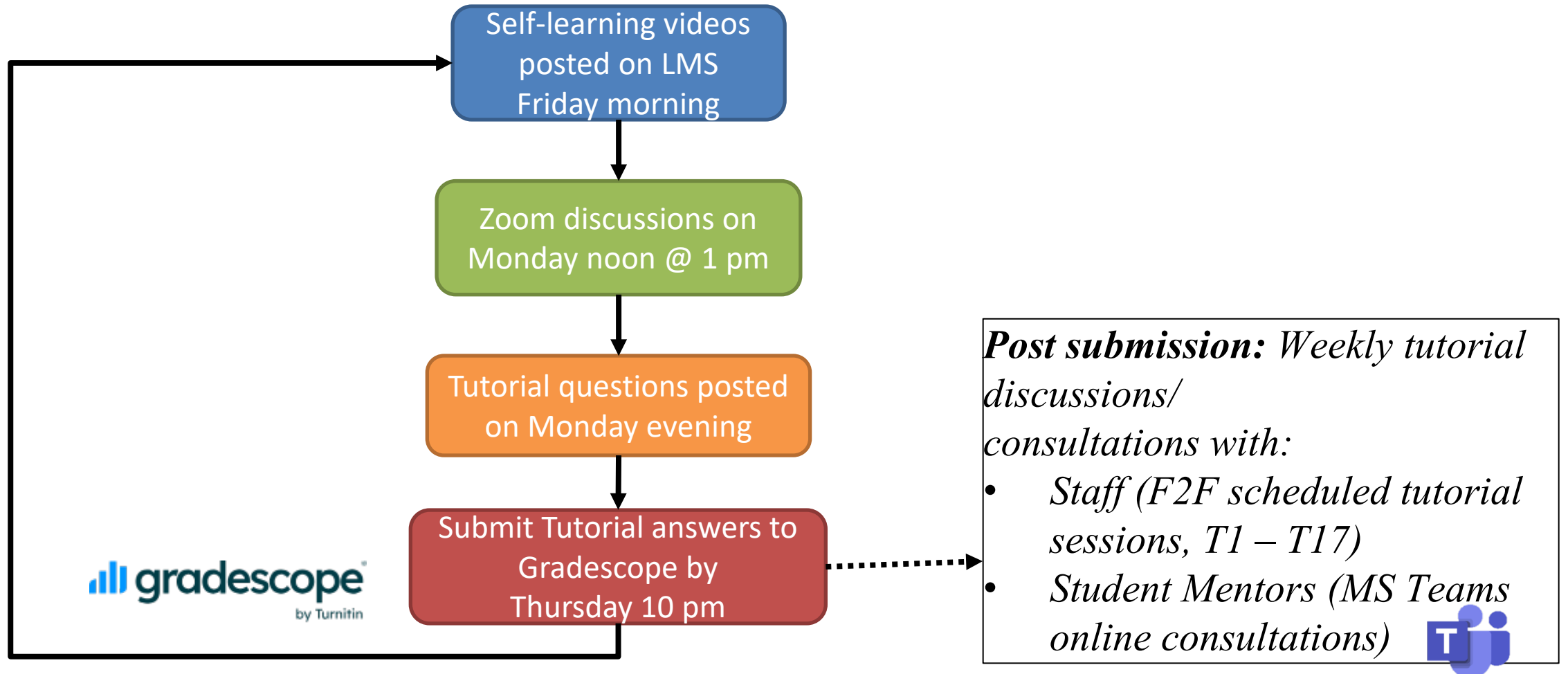Feedback on proposed solutions

SET YOUR LMS NOTIFICATIONS

Instant Notifications | Email | SMS

	Email	SMS
Content - content item created		
Content - content item updated	☑	
Content - content overview updated		
Discussions - new post in a forum, topic, or thread that I subscribed to in instant notifications	☑	
Dropbox - dropbox folder due date or end date is 2 days away	☑	
ePortfolio - feedback added to subscribed items	☑	
ePortfolio - another user has subscribed to your updates	☑	
ePortfolio - feedback added to my items	☑	
Grades - grade item released	☑	
Grades - grade item updated	☑	
News - item updated	☑	
News - new item available	☑	
Quizzes - quiz end date is 2 days away	☑	

Viewing as Student ✕

Profile
Notifications
Account Settings

Log Out

INF1003 Weekly Workflow

Self-learning videos posted on LMS Friday morning

Zoom discussions on Monday noon @ 1 pm

Tutorial questions posted on Monday evening

Submit Tutorial answers to Gradescope by Thursday 10 pm

Post submission: *Weekly tutorial discussions/ consultations with:*
- *Staff (F2F scheduled tutorial sessions, T1 – T17)*
- *Student Mentors (MS Teams online consultations)*