



Terence Sim

15, 16 Aug 2018

*I can do it!*

CS123I ~~Discrete Structures~~



## Message of the Day

I can do it!

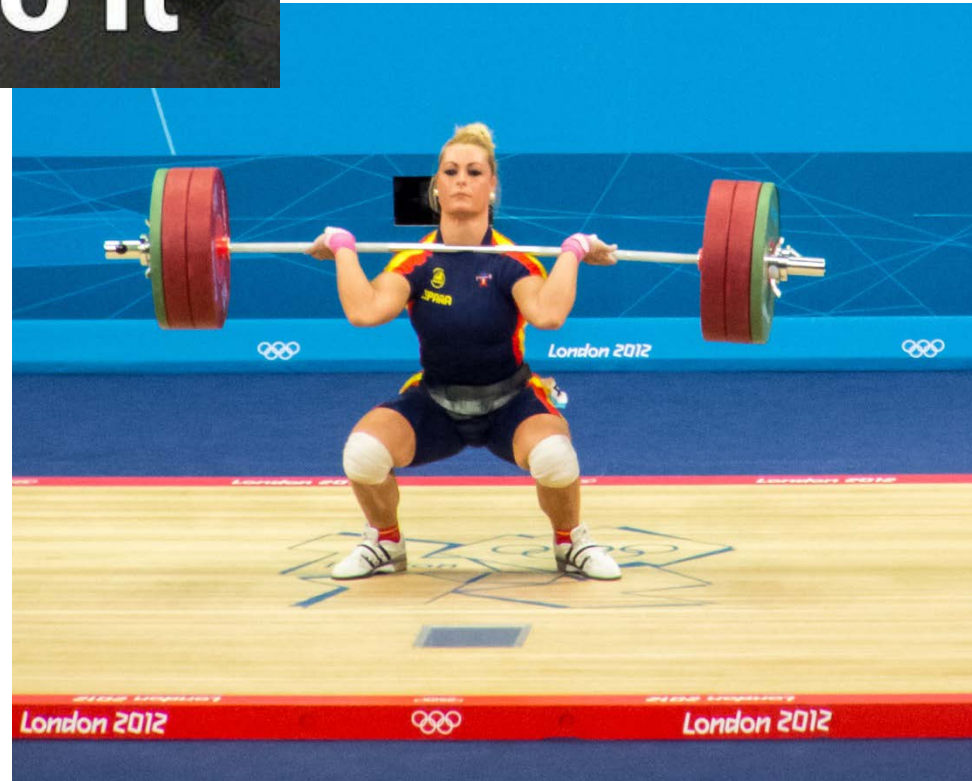
I can do it!

I can do it!



Don't feel like this

But like this



# Think Positive

Whether you THINK you CAN

or

You THINK you CAN'T,

you're right!

# Teaching Staff

2 Lecturers:



**Terence Sim**

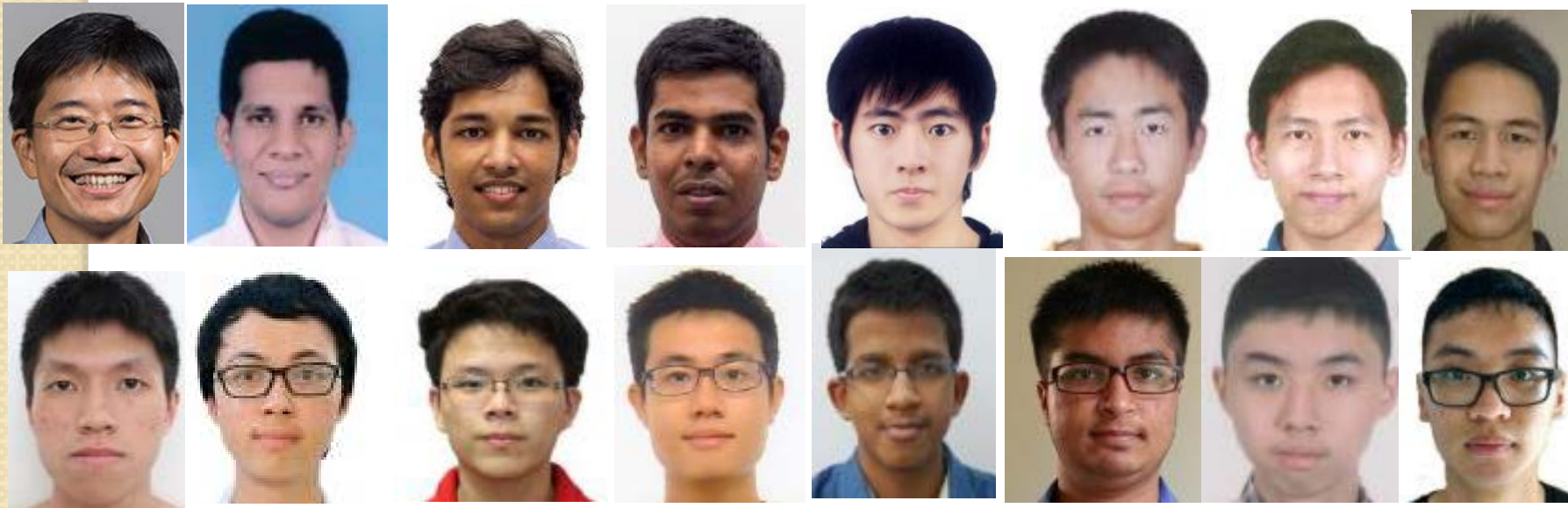
[tsim@comp.nus.edu.sg](mailto:tsim@comp.nus.edu.sg)



**Aaron Tan**

[tantc@comp.nus.edu.sg](mailto:tantc@comp.nus.edu.sg)

Tutors:



# Luminus for web lectures IVLE for everything else

<https://luminus.nus.edu.sg>

Workspace / Modules : CS1231 (18/19 Sem 1) / Overview

Module

- Overview
- Consultation
- Class & Groups

Tools

- Announcement
- Assessment
- Chat Room
- Files (Workbin)
- Forum
- Gradebook
- Lesson Plan

Description Facilitators Readings Weblinks Timetable

## CS1231

### DISCRETE STRUCTURES

2018/2019, Semester 1  
School of Computing (Computer Science)  
Modular Credits: 4  
Class Size: 626  
Tags: --  
ASSOC PROF Terence Sim

Quick Access to Active Tools

- Announcement 0
- Files DISCRETE STRUCTURES
- Forum DISCRETE STRUCTURES (16 Jul 2018 12:00 AM - 31 Dec 2018 11:00 P
- Gradebook DISCRETE STRUCTURES
- Lesson Plan DISCRETE STRUCTURES

LumiNUS  
Elluminate your Learning Path

CS1231  
Discrete Structures  
[1810] 2018/2019 Semester 1  
Owner

DESCRIPTION COLLABORATORS READINGS WEBLINKS TIMETABLE LIBRARY RESOURCES

Preclusion  
MA1100

Description

This module introduces mathematical tools required in the study of computer science. Topics include: (1) Logic and proof techniques: propositions, conditionals, quantifications. (2) Relations and Functions: Equivalence relations and partitions. Partially ordered sets. Well-Ordering Principle. Function equality. Boolean/identity/inverse functions. Bijection. (3) Mathematical formulation of data models (linear model, trees, graphs). (4) Counting and Combinatoric: Pigeonhole Principle. Inclusion-Exclusion Principle. Number of relations on a set, number of injections from one finite set to another,

<https://ivle.nus.edu.sg>

Read IVLE daily; ignorance is not an excuse.

Use the Forum to ask questions, share ideas, and discussion relevant topics.

Be courteous, even when disagreeing.

Do not post anything that may violate the owner's copyright.

# Also read Module web site



NUS National University of Singapore  
School of Computing  
Designed by [Aaron Tan](#) | [Terms of Use](#) © NUS 2016-2018  
CS1231 Discrete Structures  
Thursday, 2 August 2018

## Module Info...

- [Description](#)
- [Staff](#)
- [Schedules](#)
- [CA](#)
- [Policies](#)

## Resources...

- [Books](#)
- [Online Lectures](#)

## CA...

- [Tutorials](#)
- [Assignments](#)
- [Term Tests](#)
- [Exams](#)

## Misc...

- [Info](#)
- [Freshmen](#)
- [Articles](#)

## AY2018/9 Semester 1 Module Information - Schedules

### Calendar:

For a complete academic calendar, see [University's calendar](#).

August 2018							September 2018								
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat		
		1	2	3	4	5	3:						1		
0:	6	7	8	9	10	11	12	4:	2	3	4	5	6	7	8
1:	12	13	14	15	16	17	18	5:	9	10	11	12	13	14	15
2:	19	20	21	22	23	24	25	6:	16	17	18	19	20	21	22
3:	26	27	28	29	30	31		RC:	23	24	25	26	27	28	29
								RC:	30						

October 2018							November 2018								
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat		
7:	0	1	2	3	4	5	6	11:				1	2	3	
8:	7	8	9	10	11	12	13	12:	4	5	6	7	8	9	10
9:	14	15	16	17	18	19	20	13:	11	12	13	14	15	16	17
10:	21	22	23	24	25	26	27	RD:	18	19	20	21	22	23	24
11:	28	29	30	31				E1:	25	26	27	28	29	30	1

Recess week: 22 - 30 Sep 2018

Public holidays: 9 Aug (National Day), 22 Aug (Hari Raya Haji), 6 Nov (Deepavali)

CS1231 Exam: 1 Dec

(See [Examination Time-Table](#))

### NUS Class Time-Table:

Please see [NUS Class Time-Table](#).

# Lectures & Tutorials

- Attendance will be taken during tutorials, but not lectures.
  - Stay with your tutorial group for the whole semester; do not switch group
- Pay attention and participate in class
- Do not distract others
  - No Pokemon or games
  - No watching videos
  - No social networking or messaging
- Web Lectures will be available in Luminus a day or two after each lecture.



# Assessment

Final Exam	50%
Midterm Exam	25%
Two Assignments (10% each)	20%
Tutorial Attendance	5%

Final and Midterm Exams are **OPEN BOOK** (more details later). Basically, this means you can bring in **hardcopy** notes, textbook. Softcopy **NOT** allowed.

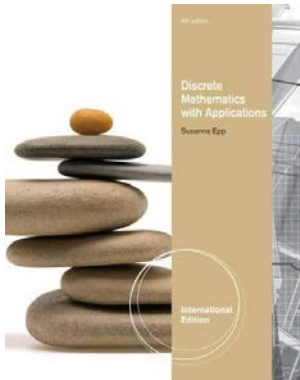
# Exam Dates



Midterm exam:  
Final exam:

TBA (most likely 1 Oct.)  
Sat, 1 Dec 2018, afternoon

# Books



## [Discrete Mathematics with Applications, International Edition 4th Edition](#)

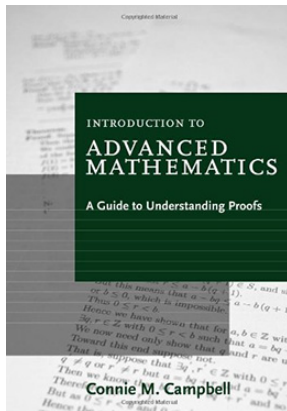
Susanna S. Epp

ISBN-13: 9780495826163 | ISBN-10: 0495826162

© 2011 | Published | 984 Pages

List Price: S\$326.25

**Special Adoption Price: S\$77.60 (Inclusive of 7% GST)**



## [Introduction to Advanced Mathematics: A Guide to Understanding Proofs 1st Edition](#)

Connie M. Campbell

ISBN-13: 9780547165387 | ISBN-10: 0547165382

© 2012 | Published | 144 Pages

List Price: S\$59.75

**Special Adoption Price: S\$25.90 (Inclusive of 7% GST)**

Special bundle price: [both books for S\\$80.40](#) (incl. 7% GST)

Note: both are also available at Central Library (RBR)

# Avoid Plagiarism at all costs!

Group study is fine, but write up your own solutions yourself. Do not copy.

Also see:

<http://emodule.nus.edu.sg/ac/>

<https://www.comp.nus.edu.sg/undergraduates/plagiarism.html>

# Action Items

Register for a tutorial slot  
via CORS asap

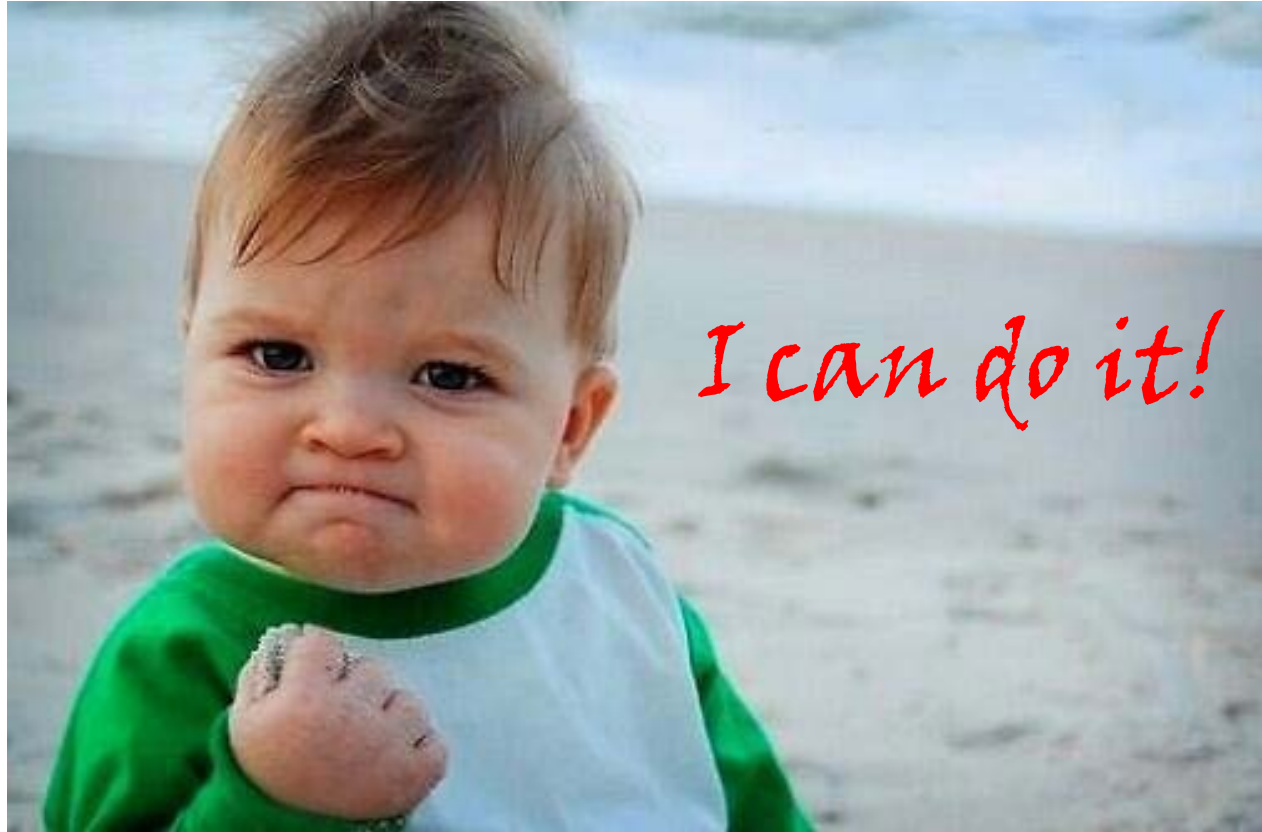
Next Wed, 22 Aug 2018 is a public holiday.

No lecture for Group 1.

Instead, you may attend Group 2's lecture on  
Thurs, 23 Aug, in I<sup>3</sup> Auditorium, from 2pm –  
4pm (via live streaming)

Or view the web lecture in Luminus.

This module is tough, but ...



<http://www.medicaldaily.com/fist-clenching-can-improve-your-memory-study-finds-245254>