
Data Structures and Algorithms

COMP 103

2018-19

Semester 2

Dr. Kerese Manueli

Computer Science

Victoria University of Wellington

Welcome! Huānyíng!

- COMP103 is the second core course for **COMP** , **ECEN**, CGRA, SWEN, CYBR

Welcome! Huānyíng!

- COMP103 is the second core course for **COMP** , **ECEN**, CGRA, SWEN, CYBR
- Core principles of **Computer Science** and essential programming skills

Welcome! Huānyíng!

- COMP103 is the second core course for **COMP** , **ECEN**, CGRA, SWEN, CYBR
- Core principles of **Computer Science** and essential programming skills
- COMP103 builds on COMP102

Welcome! Huānyíng!

- COMP103 is the second core course for **COMP** , **ECEN**, CGRA, SWEN, CYBR
- Core principles of **Computer Science** and essential programming skills
- COMP103 builds on COMP102
- Basis for all the 200-level COMP, SWEN, NWEN, CGRA, CYBR courses.

Welcome! Huānyíng!

- COMP103 is the second core course for **COMP** , **ECEN**, CGRA, SWEN, CYBR
- Core principles of **Computer Science** and essential programming skills
- COMP103 builds on COMP102
- Basis for all the 200-level COMP, SWEN, NWEN, CGRA, CYBR courses.
- COMP 103 Course web page:
 - https://ecs.victoria.ac.nz/Courses/XMUT103_2020T1/WebHome

Welcome! Huānyíng!

- COMP103 is the second core course for **COMP** , **ECEN**, CGRA, SWEN, CYBR
- Core principles of **Computer Science** and essential programming skills
- COMP103 builds on COMP102
- Basis for all the 200-level COMP, SWEN, NWEN, CGRA, CYBR courses.
- COMP 103 Course web page:
 - https://ecs.victoria.ac.nz/Courses/XMUT103_2019T1/WebHome
- COMP 102 Course web page
 - https://ecs.victoria.ac.nz/Courses/XMUT102_2019T2/WebHome

COMP 103 Home web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/WebHome



School of
Engineering and Computer Science

Te Kura Mātai Pūkaha, Pūrōrohiko

↑ Course Homepages

XMUT103 home

Course Outline

Lecture Schedule

Weekly Timetable

Assignments

Submission

Your Marks

People

Java Resources

Java documentation

↑ [School of Engineering and Computer Science](#) ▶ [Courses/XMUT103_2020T1](#) ▶ WebHome

Introduction to Data Structures and Algorithms (XMUT): XMUT103 2020 Trimester T1.

Welcome to XMUT103 for 2020 Tri T1.

Course Pages and Resources:

- [Course Outline](#)
- [Weekly Timetable](#)
- [Schedule and Notes](#) with links to lectures slides.
- [Assianments](#): handouts, downloads and starter files

COMP 103 Home web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/WebHome



School of
Engineering and Computer Science

Te Kura Mātai Pūkaha, Pūrōrohiko

↑ [Course Homepages](#)

XMUT103 home

[Course Outline](#)

[Lecture Schedule](#)

[Weekly Timetable](#)

[Assignments](#)

[Submission](#)

[Your Marks](#)

[People](#)

[Java Resources](#)

[Java documentation](#)

↑ [School of Engineering and Computer Science](#) ▶ [Courses/XMUT103_2020T1](#) ▶ [WebHome](#)

Introduction to Data Structures and Algorithms (XMUT): XMUT103 2020 Trimester T1.

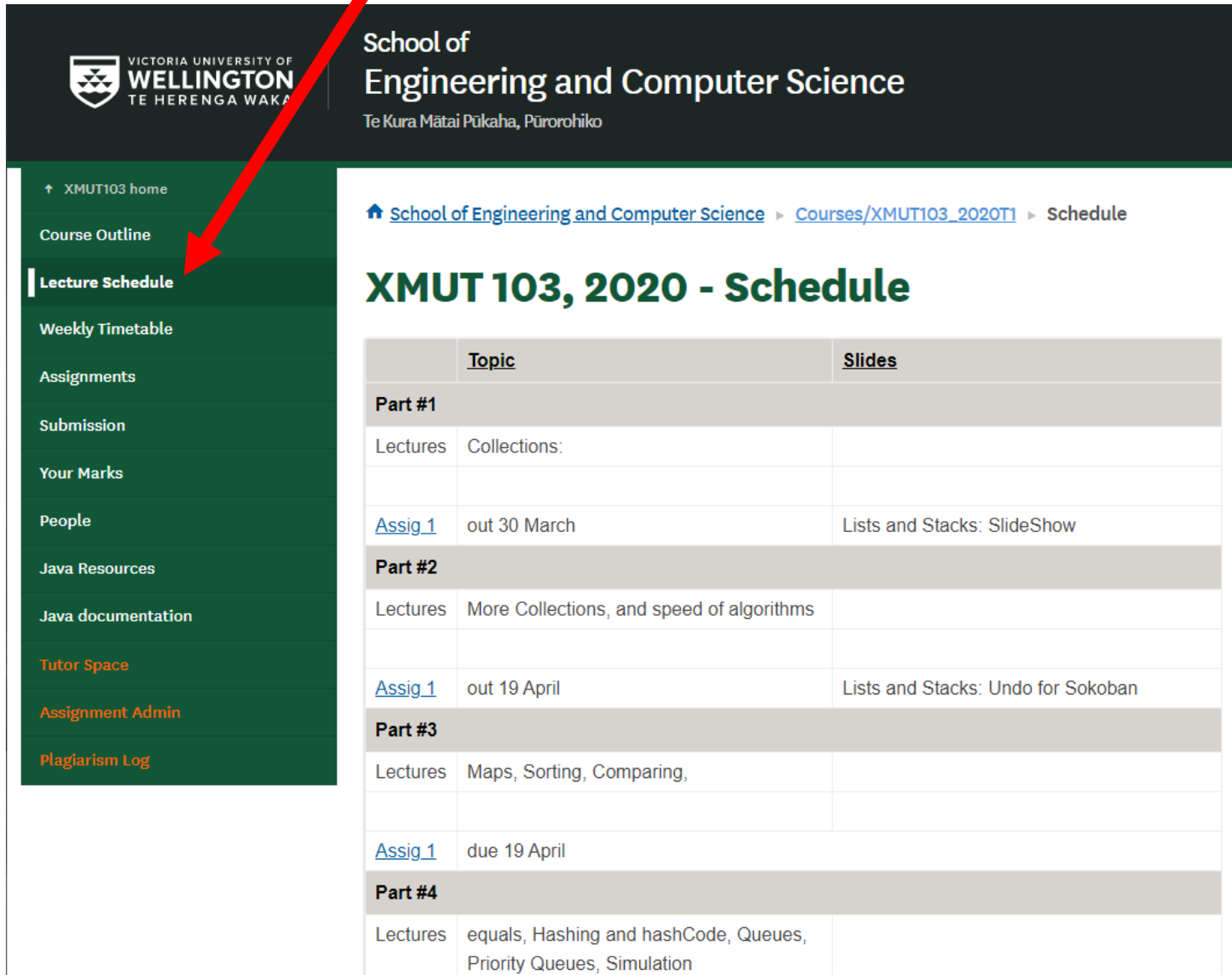
Welcome to XMUT103 for 2020 Tri T1.

Course Pages and Resources:

- [Course Outline](#)
- [Weekly Timetable](#)
- [Schedule and Notes](#) with links to lectures slides.
- [Assianments](#): handouts, downloads and starter files

COMP 103 Lecture Schedule web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/Schedule



The screenshot shows the website header for the School of Engineering and Computer Science at Victoria University of Wellington. The left sidebar contains navigation links, with 'Lecture Schedule' highlighted. The main content area displays the course title and a table of the lecture schedule.

School of Engineering and Computer Science
Te Kura Mātai Pūkaha, Pūrorohiko

↑ XMUT103 home

Course Outline

Lecture Schedule

Weekly Timetable

Assignments

Submission

Your Marks

People

Java Resources

Java documentation

Tutor Space

Assignment Admin

Plagiarism Log

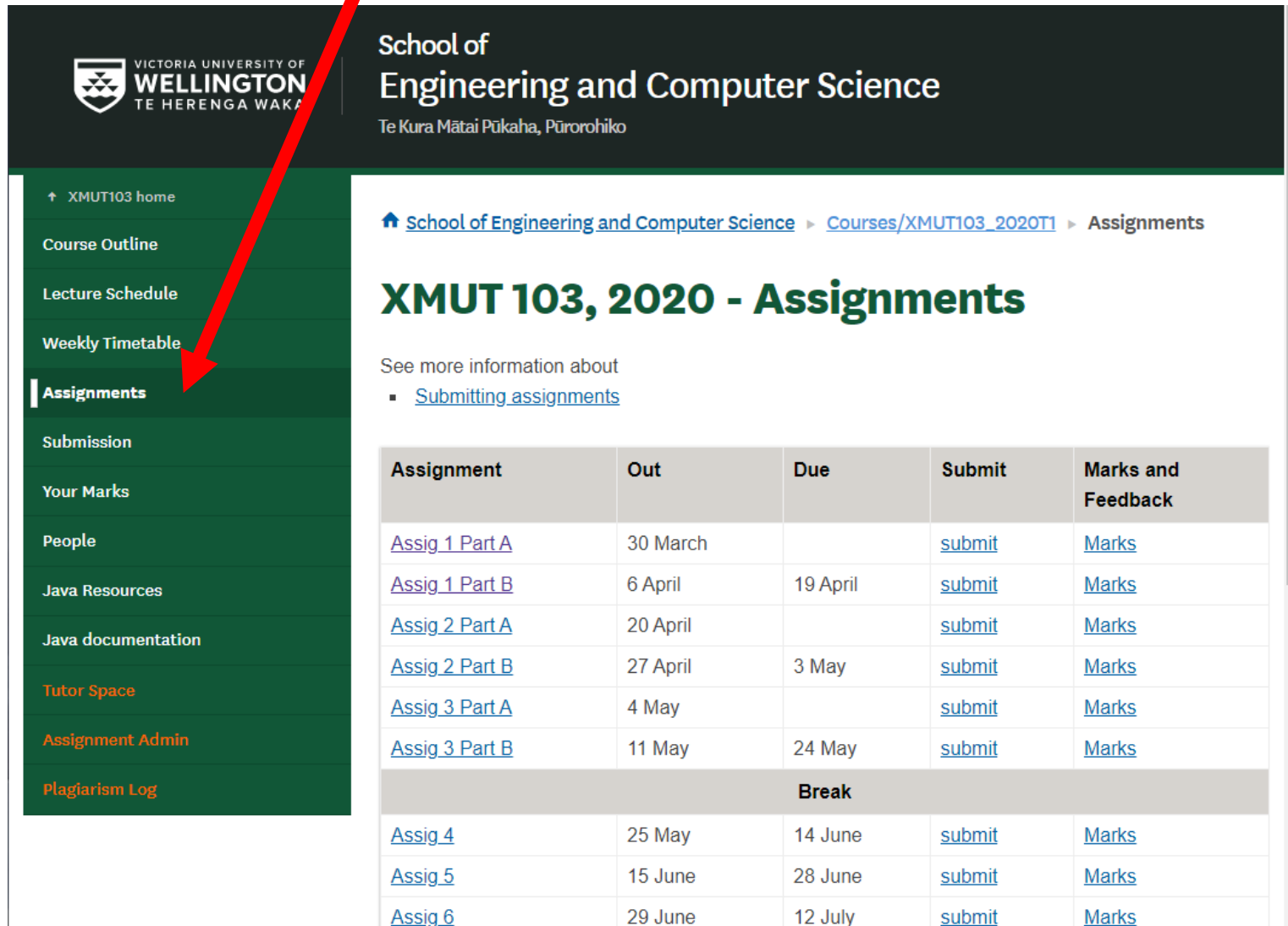
🏠 [School of Engineering and Computer Science](#) ▶ [Courses/XMUT103_2020T1](#) ▶ Schedule

XMUT 103, 2020 - Schedule

	Topic	Slides
Part #1		
Lectures	Collections:	
Assig_1	out 30 March	Lists and Stacks: SlideShow
Part #2		
Lectures	More Collections, and speed of algorithms	
Assig_1	out 19 April	Lists and Stacks: Undo for Sokoban
Part #3		
Lectures	Maps, Sorting, Comparing,	
Assig_1	due 19 April	
Part #4		
Lectures	equals, Hashing and hashCode, Queues, Priority Queues, Simulation	

COMP 103 Assignments web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/Assignments



School of Engineering and Computer Science
Te Kura Mātai Pūkaha, Pūrorohiko

↑ XMUT103 home

Course Outline

Lecture Schedule

Weekly Timetable

Assignments

Submission

Your Marks

People

Java Resources

Java documentation

Tutor Space

Assignment Admin

Plagiarism Log

↑ [School of Engineering and Computer Science](#) ▶ [Courses/XMUT103_2020T1](#) ▶ Assignments

XMUT 103, 2020 - Assignments


See more information about

- [Submitting assignments](#)

Assignment	Out	Due	Submit	Marks and Feedback
Assig 1 Part A	30 March		submit	Marks
Assig 1 Part B	6 April	19 April	submit	Marks
Assig 2 Part A	20 April		submit	Marks
Assig 2 Part B	27 April	3 May	submit	Marks
Assig 3 Part A	4 May		submit	Marks
Assig 3 Part B	11 May	24 May	submit	Marks
Break				
Assig 4	25 May	14 June	submit	Marks
Assig 5	15 June	28 June	submit	Marks
Assig 6	29 June	12 July	submit	Marks

COMP 103 Assignment1 PartA web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/Assignments



VICTORIA UNIVERSITY OF WELLINGTON
TE HERENGA WAKA

School of Engineering and Computer Science
Te Kura Mātai Pūkaha, Pūrorohiko

- ↑ XMUT103 home
- Course Outline
- Lecture Schedule
- Weekly Timetable
- Assignments**
- Submission
- Your Marks
- People
- Java Resources
- Java documentation
- Tutor Space
- Assignment Admin
- Plagiarism Log

↑ [School of Engineering and Computer Science](#) ▶ [Courses/XMUT103_2020T1](#) ▶ Assignments

XMUT 103, 2020 - Assignments

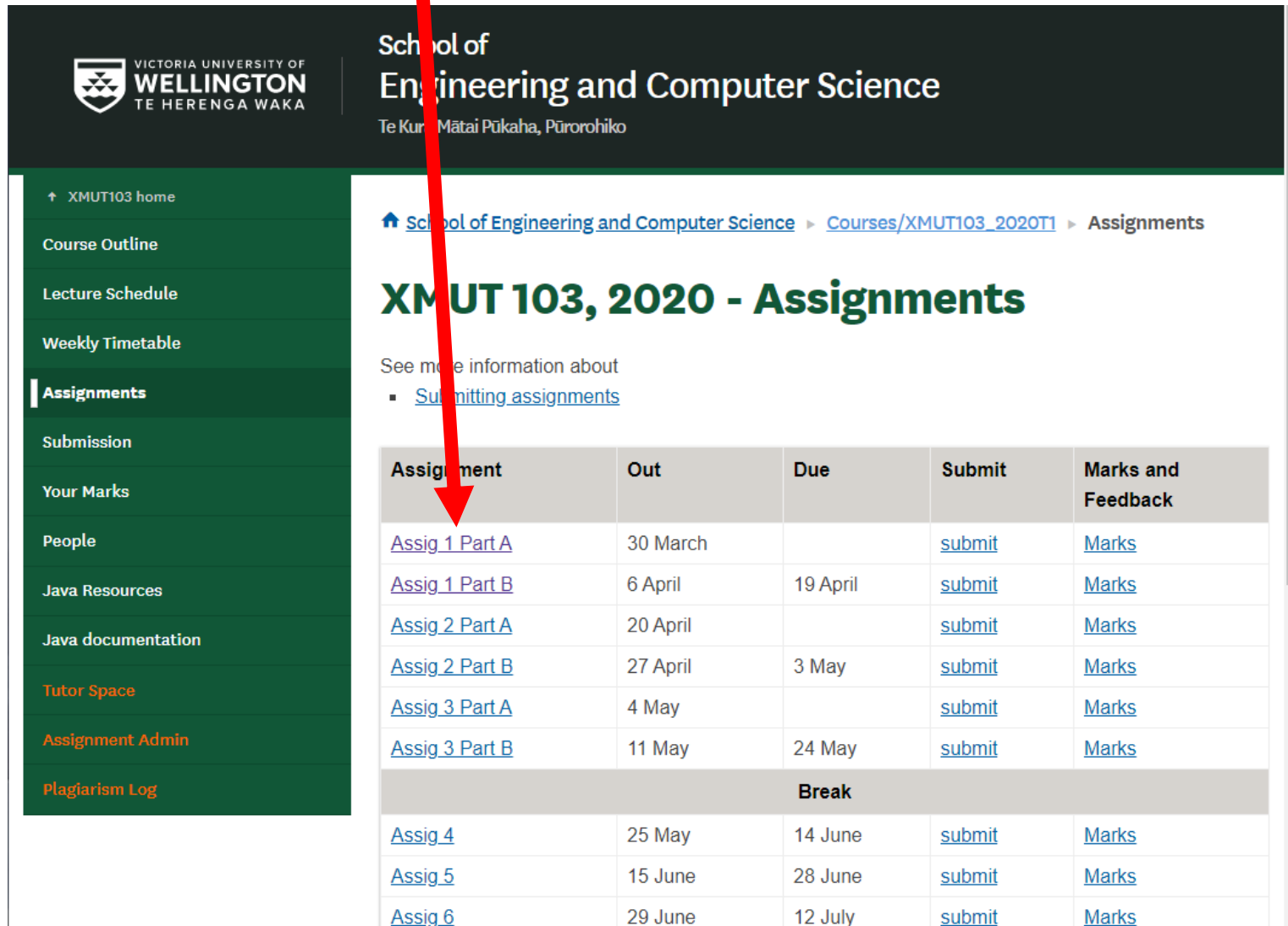
See more information about

- [Submitting assignments](#)

Assignment	Out	Due	Submit	Marks and Feedback
Assig 1 Part A	30 March		submit	Marks
Assig 1 Part B	6 April	19 April	submit	Marks
Assig 2 Part A	20 April		submit	Marks
Assig 2 Part B	27 April	3 May	submit	Marks
Assig 3 Part A	4 May		submit	Marks
Assig 3 Part B	11 May	24 May	submit	Marks
Break				
Assig 4	25 May	14 June	submit	Marks
Assig 5	15 June	28 June	submit	Marks
Assig 6	29 June	12 July	submit	Marks

COMP 103 Assignment1 PartA web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/Assignments



School of Engineering and Computer Science
Te Kura Mātaī Pūkaha, Pūrōrohiko

↑ XMUT103 home

Course Outline

Lecture Schedule

Weekly Timetable

Assignments

Submission

Your Marks

People

Java Resources

Java documentation

Tutor Space

Assignment Admin

Plagiarism Log

↑ School of Engineering and Computer Science ▶ Courses/XMUT103_2020T1 ▶ Assignments

XMUT 103, 2020 - Assignments

See more information about

- [Submitting assignments](#)

Assignment	Out	Due	Submit	Marks and Feedback
Assig 1 Part A	30 March		submit	Marks
Assig 1 Part B	6 April	19 April	submit	Marks
Assig 2 Part A	20 April		submit	Marks
Assig 2 Part B	27 April	3 May	submit	Marks
Assig 3 Part A	4 May		submit	Marks
Assig 3 Part B	11 May	24 May	submit	Marks
Break				
Assig 4	25 May	14 June	submit	Marks
Assig 5	15 June	28 June	submit	Marks
Assig 6	29 June	12 July	submit	Marks

COMP 103 Assignments web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/Assignment1PartA

School of Engineering and Computer Science
Te Kura Mātai Pūkaha, Pūrōrohiko

↑ XMUT103 home

Course Outline

Lecture Schedule

Weekly Timetable

Assignments

Submission

Your Marks

People

Java Resources

Java documentation

Tutor Space

Assignment Admin

Plagiarism Log

🏠 School of Engineering and Computer Science ▶ Courses/XMUT103_2020T1 ▶ Assignment1PartA

Introduction to Data Structures and Algorithms Assignment 1 Part A: ArrayLists

- Due , 7pm

Resources and links

- Download [zip file](#) containing the necessary code and data.
- Java [Documentation](#)
- [Submit](#) your answers
- [Marks and feedback](#)

What To Hand In

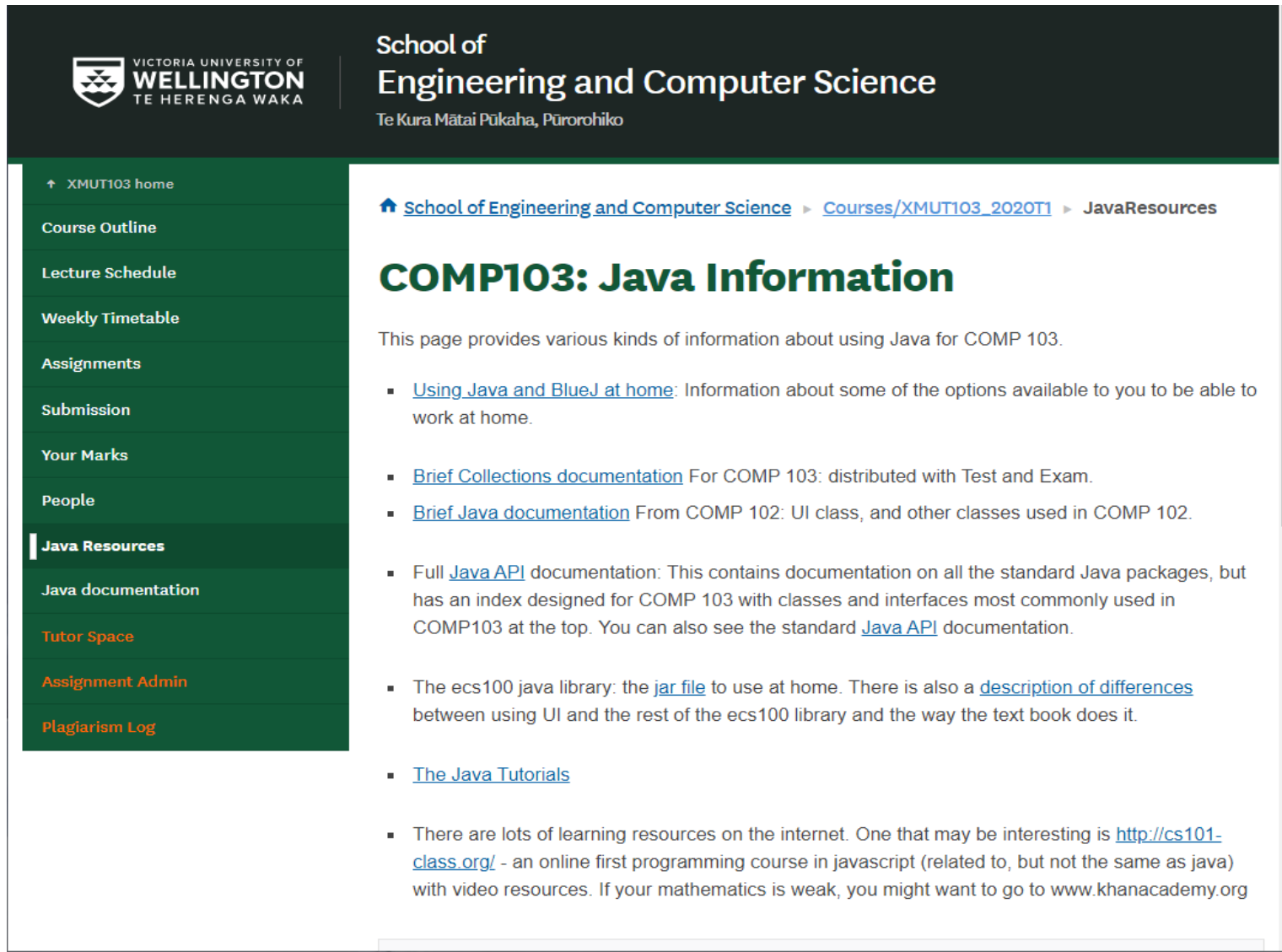
- `SlideShow.java`


Do not rename these files.

Remember to submit all of these files. When you have submitted them, check that you can read the files listed on the submission page, and complete the submission process.

COMP 103 Java Resources web page

https://ecs.wgtn.ac.nz/Courses/XMUT103_2020T1/JavaResources



 VICTORIA UNIVERSITY OF WELLINGTON
TE HERENGA WAKA

School of Engineering and Computer Science
Te Kura Mātai Pūkaha, Pūrorohiko

↑ XMUT103 home

Course Outline

Lecture Schedule

Weekly Timetable

Assignments

Submission

Your Marks

People

Java Resources

Java documentation

Tutor Space

Assignment Admin

Plagiarism Log

↑ School of Engineering and Computer Science ▶ Courses/XMUT103_2020T1 ▶ JavaResources

COMP103: Java Information

This page provides various kinds of information about using Java for COMP 103.

- [Using Java and BlueJ at home](#): Information about some of the options available to you to be able to work at home.
- [Brief Collections documentation](#) For COMP 103: distributed with Test and Exam.
- [Brief Java documentation](#) From COMP 102: UI class, and other classes used in COMP 102.
- Full [Java API](#) documentation: This contains documentation on all the standard Java packages, but has an index designed for COMP 103 with classes and interfaces most commonly used in COMP103 at the top. You can also see the standard [Java API](#) documentation.
- The ecs100 java library: the [jar file](#) to use at home. There is also a [description of differences](#) between using UI and the rest of the ecs100 library and the way the text book does it.
- [The Java Tutorials](#)
- There are lots of learning resources on the internet. One that may be interesting is <http://cs101-class.org/> - an online first programming course in javascript (related to, but not the same as java) with video resources. If your mathematics is weak, you might want to go to www.khanacademy.org