PTRL5004

Numerical Reservoir Simulation

Term Three // 2020

School of Minerals & Energy Resources Engineering // UNSW Engineering

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Course Overview

Staff Contact Details

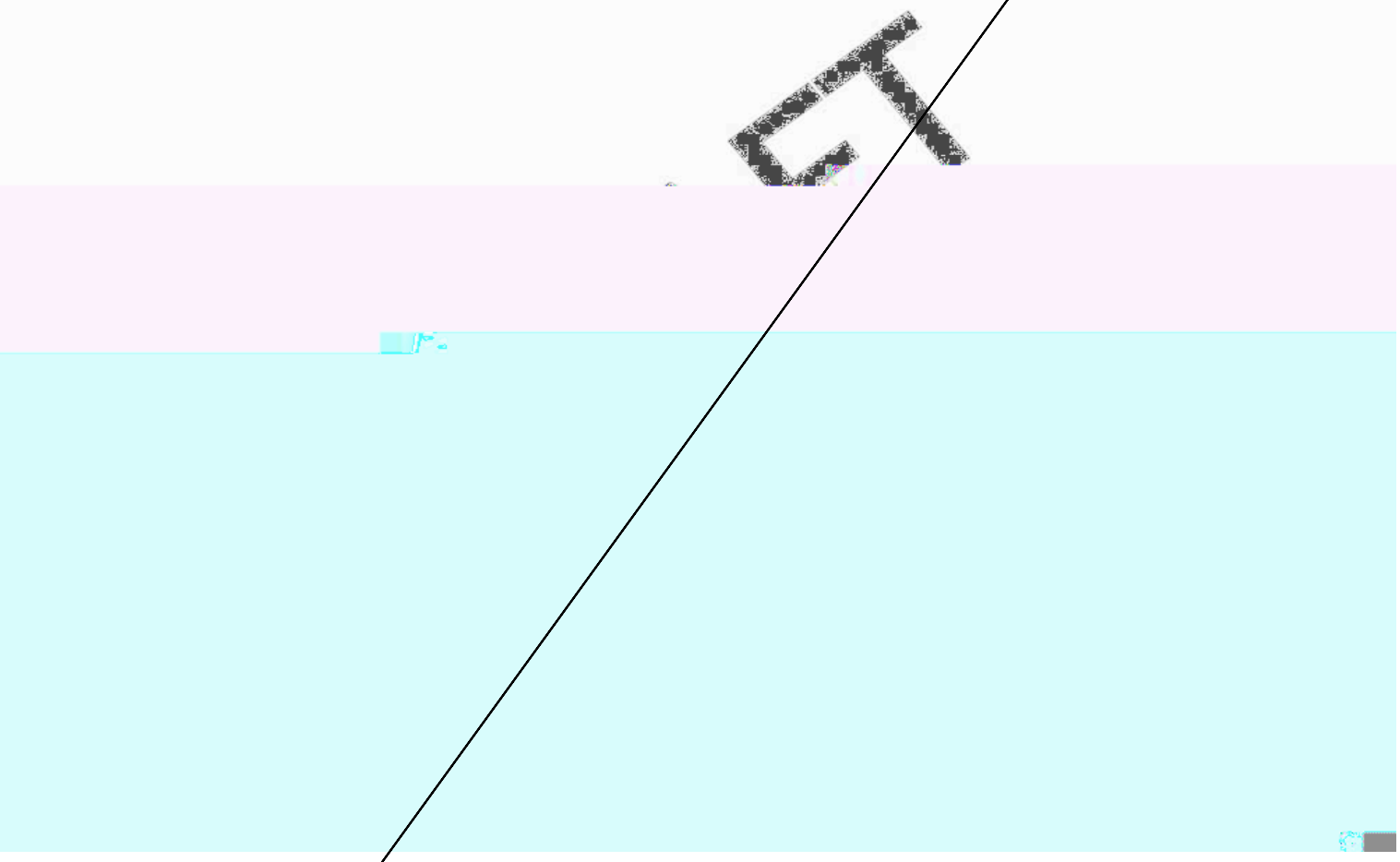
Convenors

Name	Email	Availability	Location	Phone
Furqan Le-Hussain	furqan.hussain@unsw.edu.au	Online (Teams)	TETB 219	

Demonstrators

Name	Email	Availability	Location	Phone
Hang Yin	z5139343@unsw.edu.au		Online	

School Contact Information



Course Details

Credit Points 6

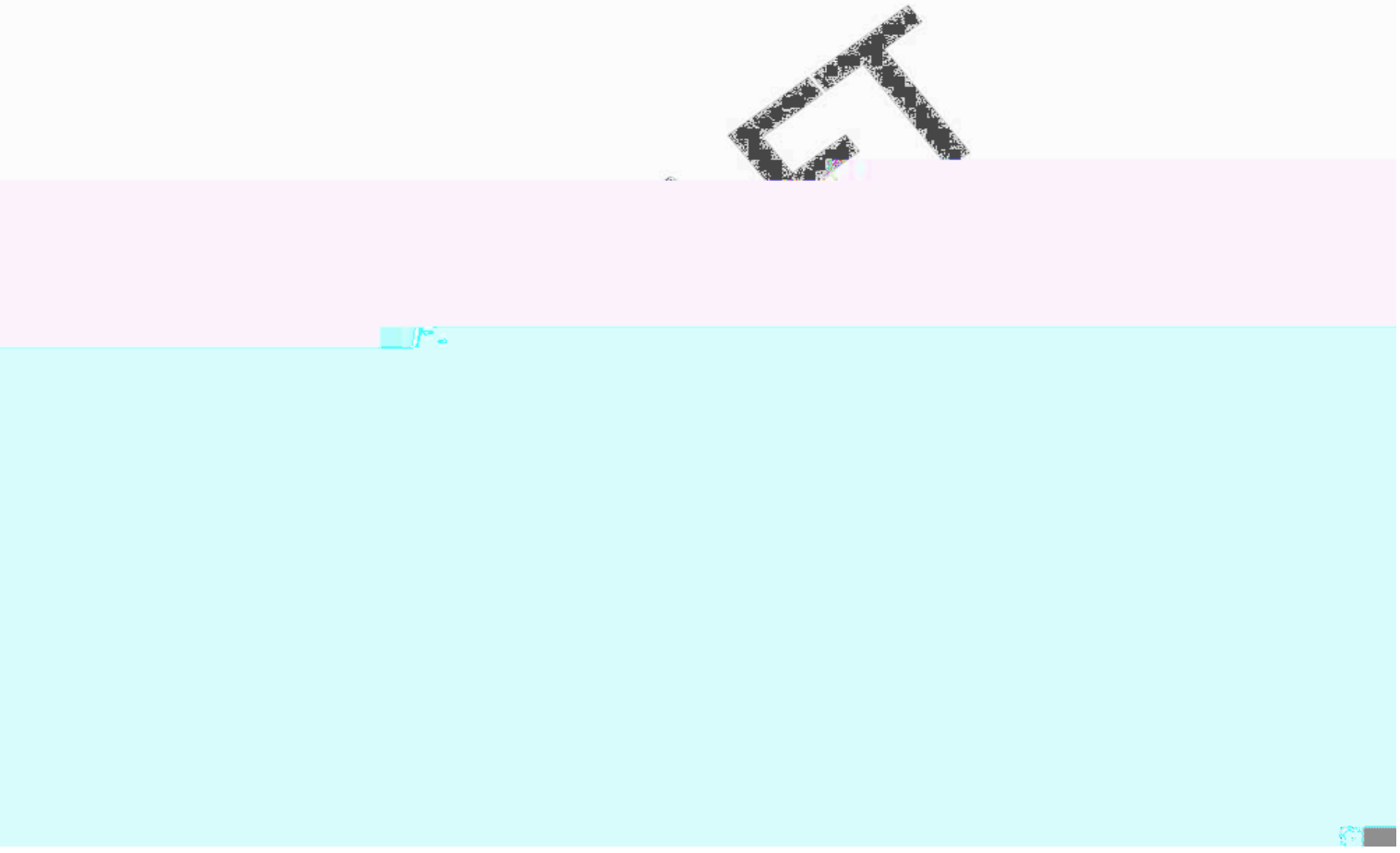
Summary of the Course

Reservoir simulation and reservoir management. Differential material balance equations. Relative permeability, capillary pressure and residual saturations in two and three-phase flow. Compositional reservoir simulator equations and the Black Oil Model. Numerical solution of simulator equations. Truncation errors and stability. Transmissibilities, upstream weighing, explicit and implicit and explicit

Assessment

Assessment Tasks

Assessment task	Weight			



Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Schedule

View class timetable

Timetable

Date	Type	Content
O Week: 8 September - 9 September		
Week 1: 14 September - 18 September		Introduction to a simulation study
Week 2: 21 September - 25 September		Simulator tion to a simulation study

Simulator tion to a simulation study

Simulator tion to a simulation study

Week 10: 16 November - 20 November		Simulating CO2 sequestration

Resources

Prescribed Resources

Not available

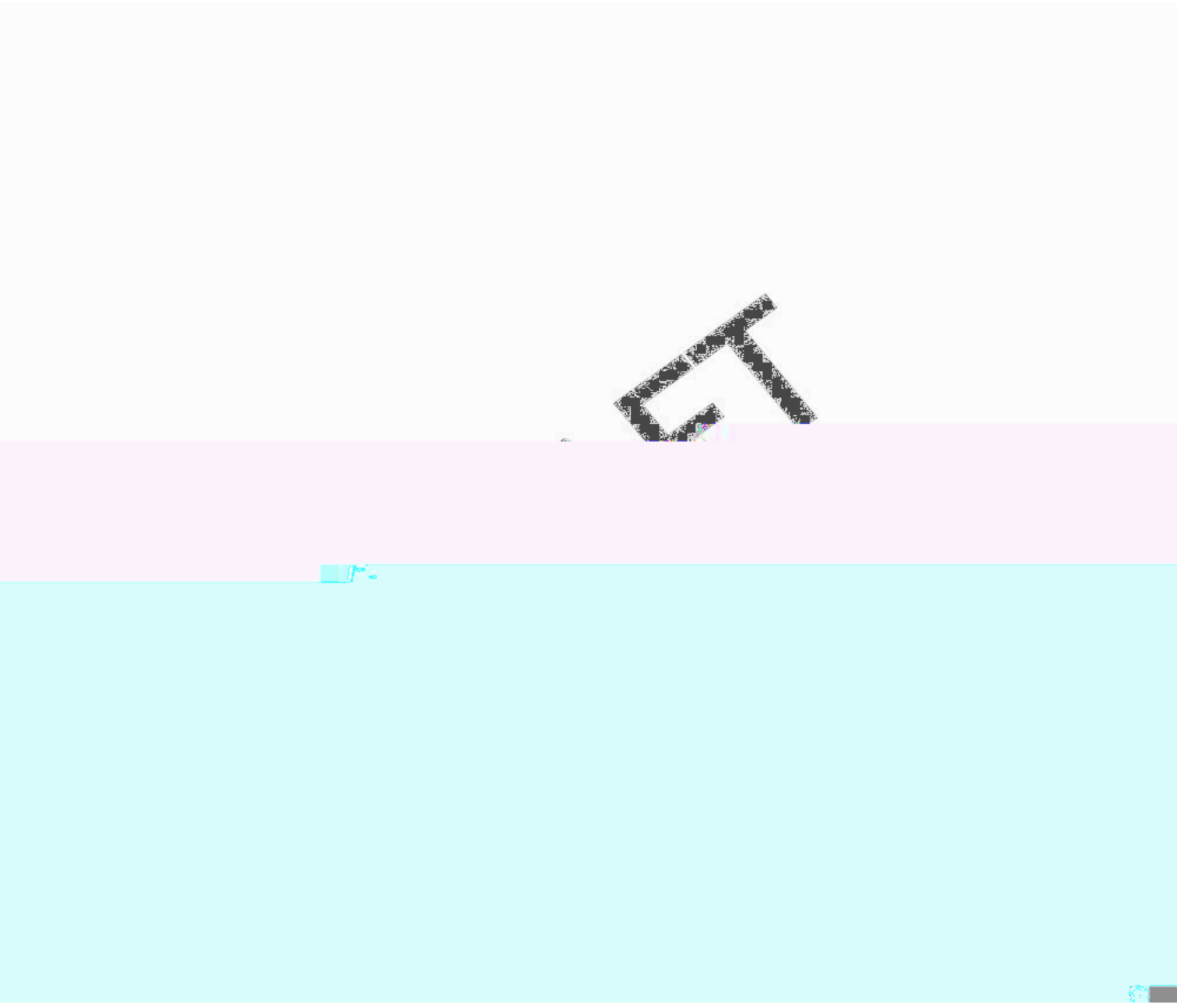
Recommended Resources

Not available

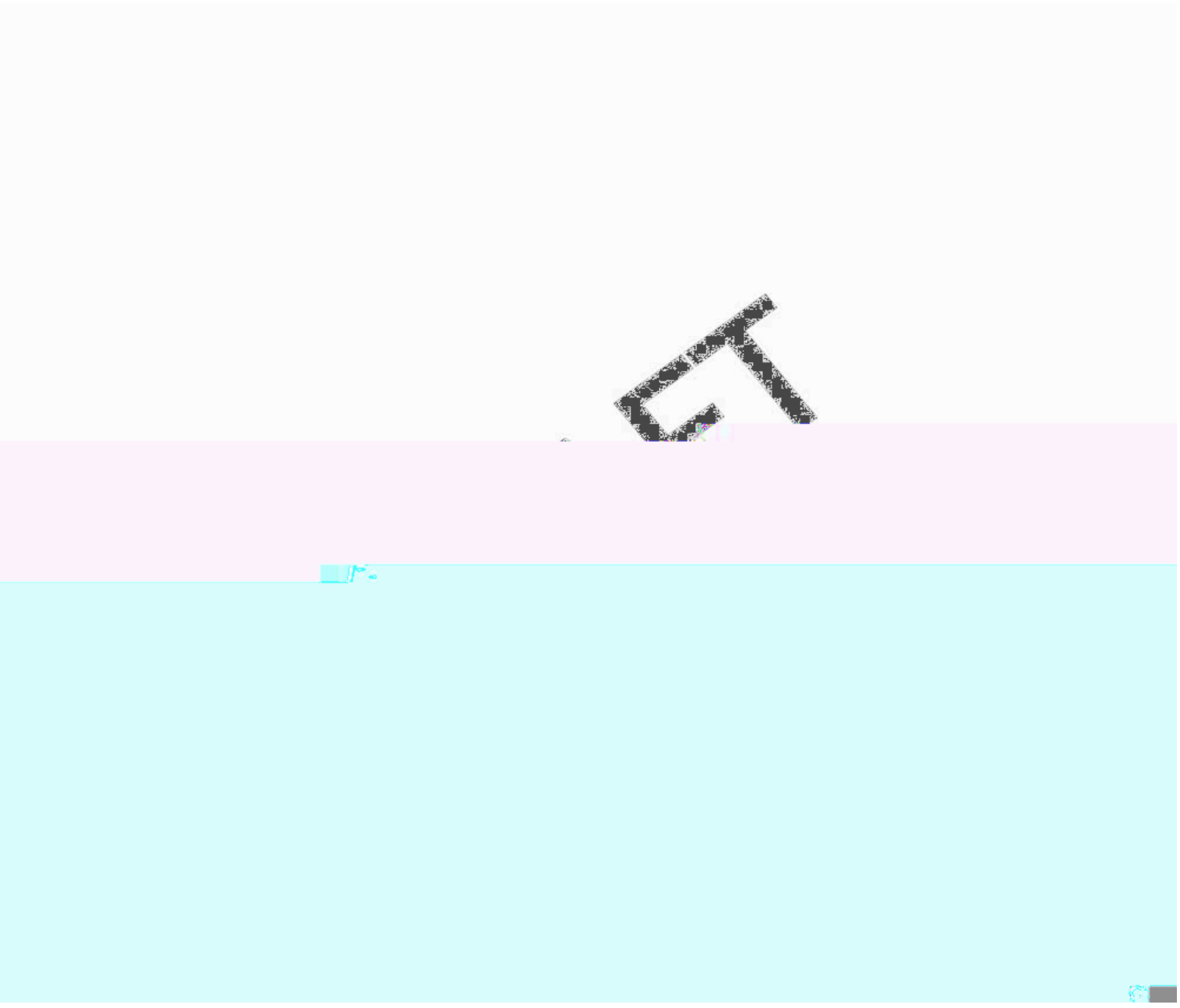
Course Evaluation and Development

At the end of each course, all students will have the opportunity to complete a course evaluation form.

Submission of Assessment Tasks



Academic Honesty and Plagiarism



Academic Information

Course Results

For details on UNSW assessment policy, please visit: www.student.unsw.edu.au/assessment

- broadband connection (256 kbit/sec or faster)
- ability to view streaming video (high or low definition UNSW TV options)

More information about system requirements is available at www.student.unsw.edu.au/moodle-system-requirements

Accessing Course Materials Through Moodle

Course outlines, support materials are uploaded to Moodle, the university standard Learning Management System (LMS). In addition, on-line assignment submissions are made using the assignment dropbox facility provided in Moodle. All enrolled students are automatically included in Moodle for each course. To access these documents and other course resources, please visit: www.moodle.telt.unsw.edu.au

How We Contact You

At times, the School or your course convenors may need to contact you about your course or your enrolment. Your course convenors will use the email function within Moodle or we will contact you on your @student.unsw.edu.au email address.

We understand that you may have an existing email account and would prefer for your UNSW emails to be redirected to your preferred account. Please see instructions on how to redirect your UNSW emails: "How can I forward my emails to another account?"

How You Can Contact Us

We are always ready to assist you with your inquiries. To ensure your question is directed to the correct person, please use the email address below for:

- Enrolment or other admin questions regarding your program: https://unswinsight.microsoftcrmportals.com/web-forms/
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We acknowledge the Bedegal people who are the traditional custodians of the lands on which UNSW Kensington campus is located.