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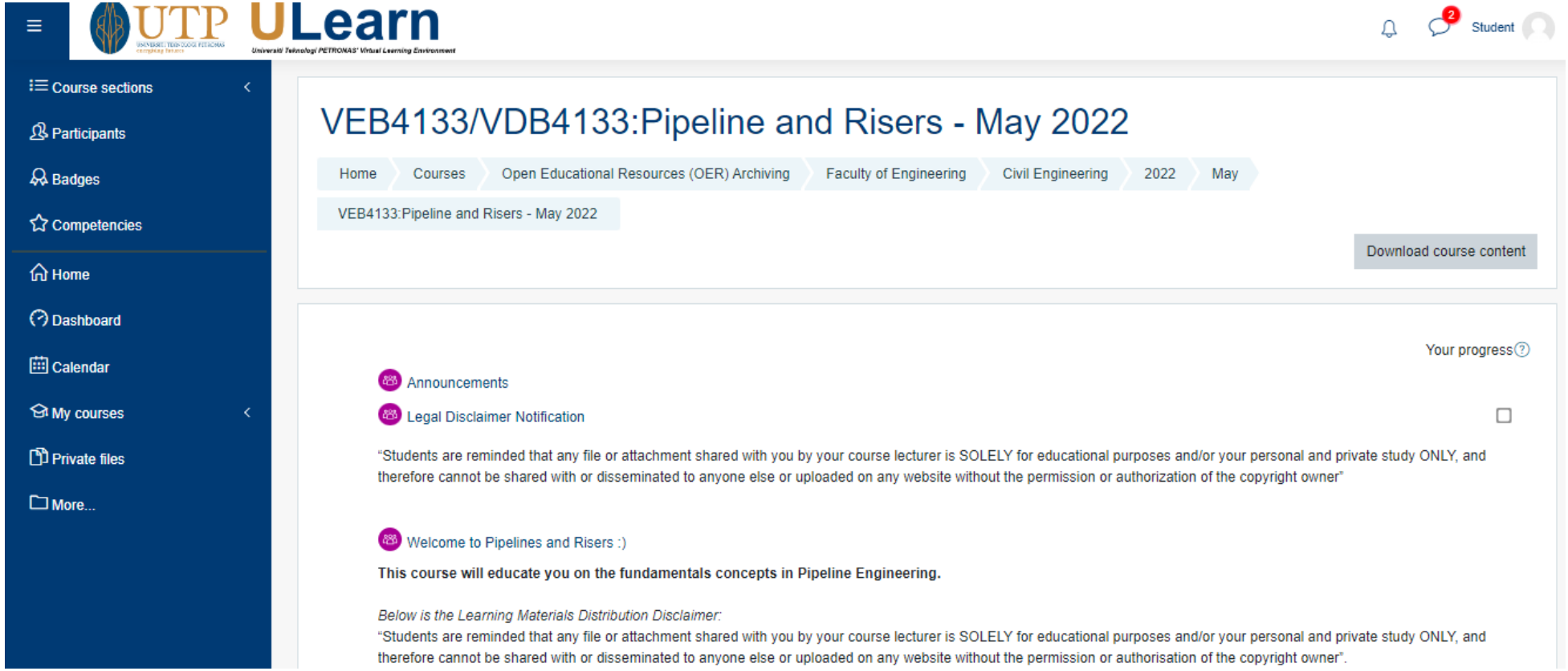
PIPELINES AND RISERS (LECTURE NOTES)

CREATED BY: ASSOC. PROF. IR. DR. ZAHIRANIZA MUSTAFFA



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BIOGRAPHY OF AUTHOR

Ir. Dr. Zahiraniza Mustaffa is an Associate Professor at the Department of Civil and Environmental Engineering, Universiti Teknologi PETRONAS (UTP) for nearly 20 years. She obtained her PhD majoring in Pipeline Reliability from Delft University of Technology, The Netherlands (2011), Master of Science in Water Resources Engineering, from the University of Alberta, Canada (2003) and Bachelor of Engineering (Hons.) in Civil Engineering from the Universiti Teknologi Malaysia (2000). Dr. Zahira specializes in the field of pipeline engineering as well as hydraulic engineering, covering the aspects of urban hydraulics and probabilistic structural designs. She involves in activities in the Women Engineers Section of the Institute of Engineers (IEM), Malaysia. She is a Chartered Engineer of the Engineering Council, UK, Graduate Member of Board of Engineer Malaysia (BEM), Member of Institute of Engineer Malaysia (IEM), Member of Institute of Marine Engineering, Science and Technology (IMarEST) and Member of the American Society of Civil Engineers (ASCE).

PREFACE

This course will cover the fundamental concept of pipeline and riser designs. The scope of the course is further elaborated into the knowledge of pipeline route selection and installation methods.

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LIST OF THE TLM AVAILABLE:

The course is delivered online, via two methods, i.e. self-learning with video presentations, and guided learning by course lecturers.

(a) List of Lecture Notes

1. Pipelines and Risers
2. Adjunct Lecture (RISERS FOR FIXED AND FLOATING OFFSHORE STRUCTURES)
3. Adjunct Lecture (Flexible Pipeline Technology and Applications for Deepwater Pipeline/Riser and Sand Erosion Mitigation)
4. Adjunct Lecture (Pipeline Engineering Solutions (P-PiES) and Application for Kasawari Carbon Capture & Storage (CCS)

(b) Video

1. Subsea Components
2. Pipeline fabrication
3. Pipeline Installation
4. Pipeline Route Selection
5. Pipeline Designs
6. Problems Associated with Pipelines