

# MA3006 Introduction - Course information

Fluid Mechanics (Nanyang Technological University)



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# Semester-1 AY 2022-23 MA-3006 Fluid Mechanics

# Topics and schedule

	Topics	
Week-1	Linear momentum	
Week-2	Angular momentum	
Week-3	Energy Equation & application	
Week-4	Flow meter	
Week-5	Dimensionless Analysis (1)	
Week-6	Dimensionless Analysis (2)	
Week-7	Viscous Flow (1)	
Recess		
Week-8	Viscous Flow (2)	
Week-9	Viscous Flow (3)	
Week-10	Fluid Machines / Rotary pumps and characteristics	
Week-11	Fluid Machines / Specific speed and system curve	
Week-12	Fluid Machines / Pump and System Matching	
Week-13	Fluid machines / Cavitation in pump	

#### **Textbook**

Munsion, B.R, Young, D F, Okiishi, T H, and Huebsch, W W, Fundamentals of Fluid Mechanics, 7<sup>th</sup> Edition, John Wiley, 2013

#### **Lecture & Tutorial**

Lectures: LAMS: 8<sup>th</sup> August to 7<sup>th</sup> November 2022

Video for each week will be released on Friday prior to that week. Weekly summary online lecture schedule on Monday 1.30 to 2.20 pm

#### Tutorials:

1<sup>st</sup> Tutorial starts on Week-2 (15<sup>th</sup> August) will be conducted in TRs by respective tutors. For cancellation and make ups of tutorial due to public holiday, please check with respective tutors

Group	Day	Time	Tutor	Venue
MA-1	Tue	0930 – 10.20 Yeo JH		TR+33
MA-2	Tue	0930 – 10.20	Li Mingyang	TR+5
MA-3	Tue	10.30 – 11.20	Yeo JH	TR+32
MA-4	Tue	10.30 – 11.20	Chan WK	TR+5
MA-5	Tue	11.30 – 12.20	Chan WK	TR+5
MA-6	Wed	0930 – 10.20	William Yeung	TR+5
MA-7	Wed	0930 – 10.20	Yeo JH	LHN TR+13



MA-8	Wed	10.30 – 11.20	Liu ShuKui	TR+5
MA-9	Wed	10.30 – 11.20	Chan WK	LHN TR+13
MA-10	Wed	11.30 – 12.20	Chan WK	LHN TR+13
MA-11	Thur	0930 – 10.20	Lam CY	TR+9
MA-12	Thur	10.30 – 11.20	Lam CY	TR+9
MA-13	Thur	11.30 – 12.20	Lam CY	TR+9
MA-14	Thur	11.30 – 12.20	Liu Shukui	TR+34

#### **Course site on NTULearn**

All course sites can be accessed from NTULearn webpage: <a href="https://ntulearn.ntu.edu.sg/">https://ntulearn.ntu.edu.sg/</a>

The main course site is: 22S1-MAE-MA3006-Fluid Mechanics

## Continual Assessment (40% of course mark)

Two CAs are scheduled as follows:

		Topics	Weightage	Structure
CA-1	Week-6 12 <sup>th</sup> Sept '20 Monday 1.30-2.30 pm	Tutorial 1 Tutorial 2 Tutorial 3 Momentum Equ Energy Equ Flow meter	20%	50 mins
CA-2	Tentatively Week-10	To be announced	20%	50 mins

No marks will be Awarded for absence without MCs or official documentation.

CA-1: Makeup will be schedule those who absence with MC.

CA-2: No makeup

Students must attempt at least one of the two CAs

## **Examination (60% of course mark)**

Final examination will cover <u>All topics</u> in this course. All questions in this examination are compulsory.

Final examination is Close Book.