

REGISTRATION

I would like to register for the Basic Biomechanics Course 2015. Enclosed herewith proof of payment.

Name

Position

Department

Institution

Email

Tel. no

Fees

LECTURE

RM 100 (NOCERAL STAFF/STUDENT)

RM 150 (NON NOCERAL STAFF/STUDENT)

LECTURE + HANDS ON

RM 320 (NOCERAL STAFF/STUDENT)

RM 400 (NON NOCERAL STAFF/STUDENT)

Food : Vegetarian/Non Vegetarian

Payment can be made by cash or bank in transfer payable to Yayasan Ortopedik:

Account Details:

Bank : MAYBANK

No: 564351504180

Should you have clarification regarding registration, please contact the Course Secretary at noceral@um.edu.my

SPEAKERS/INSTRUCTORS

*Department of Biomechanical Engineering,
Faculty of Engineering, University of Malaya*

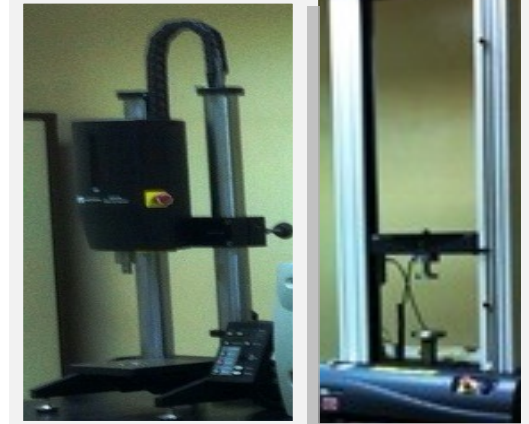
1. Prof. Ir. Dr. Noor Azuan Bin Abu Osman
2. Dr. Belinda Pinguan Murphy

*National Orthopaedic Centre of Excellence in
Research and Learning (NOCERAL) Department of
Orthopaedic Surgery, Faculty of Medicine, UM*

1. Assoc. Prof. Azlina Amir Abbas
2. Assoc. Prof. Chris Chan Yin Wei
3. Dr. Rukmanikanthan A/L Shanmugam
4. Dr. C. Sankara Kumar A/L Chandrasekaran

*Medical Devices & Technology Group, Faculty of
Biosciences & Medical Engineering, UTM Johor*

1. Prof. Ir. Dr. Mohammed Rafiq bin Dato' Abdul Kadir
2. Dr. Ardiyanshah Syahrom



7th –8th May 2015

BASIC BIOMECHANICS COURSE 2015

**VENUE: NOCERAL, Faculty of Medicine, UM
Lecture– Datin Ragayah Lecture Hall
Hands on– Biomechanics Testing and
Research Lab,**

**National Orthopaedic Centre of Excellence in
Research and Learning (NOCERAL) Department of
Orthopaedic Surgery, Faculty of Medicine,
Universiti Malaya.**

Tel: 03-7967 7873, email : noceral@um.edu.my

Welcome Remarks

In the past the biomechanics course was purely targeted to the clinical masters students covering topics of clinical relevance. However of late there are many clinical master students who have performed mechanical testing for their research project and also a growing number of master by research students who would like to perform mechanical testing. In order to cater to this varied group, we have redesigned this course to include topics of clinical relevance as well as basic understanding of biomechanics and most importantly hands on practical sessions to learn how to use and to interpret data obtained from a material testing machine. This would be the first course of its kind and hope you will benefit from it and help us to improve the course in the future.



DR. RUKMANIKANTHAN SHANMUGAM
Chairman
Basic Biomechanics Course 2015

ORGANIZING COMMITTEE

Secretary

~Mrs Siti Nur Nadia Abu Bakar

Committee

~ Ms Suhaili Mohd

~ Ms Noor Azera Bakar

~ Mr Muhamad Luthfi Zin

PROGRAM

Time	Topic
Day 1 : 7th May 2015	
0800-0830	Registration
0830-0840	Welcome remarks
0840-0900	Introduction to Biomechanics Testing and Research Lab (BTRL) <i>Dr. Tan Sik Loo</i>
0900-0920	Basic Biomechanics (Terms, Linear vs Angular Movement) <i>Dr. Rukmanikanthan A/L Shanmugam</i>
0920-1000	Basic of Vectors and Trigonometry <i>Dr. Rukmanikanthan A/L Shanmugam</i>
1000-1020	Tea Break
1020-1040	Basic Fluid Dynamics <i>Prof. Ir. Dr. Mohammed Rafiq bin Dato' Abdul Kadir</i>
1040-1100	Static Loading/ Quasi Static Loading (Tensile Compression) <i>Dr Belinda Pinguan Murphy</i>
1100-1120	Introduction to Material Testing Machines (Uniaxial, polyaxial, robotic arms, torsion, hardness, etc) <i>Prof. Ir. Dr. Noor Azuan Bin Abu Osman</i>
1120-1140	Viscoelastic Materials <i>Prof. Ir. Dr. Mohammed Rafiq bin Dato' Abdul Kadir</i>

PROGRAM

Time	Topic
1140-1200	Types of Loading (Compression, tensile, 3 point bending, 4 point bending, cantilever bending, shear loads) <i>Dr Belinda Pinguan Murphy</i>
1200-1220	Biomechanics of the Knee and TKR <i>Assoc. Prof Azlina Amir Abbas</i>
1220-1240	Biomechanics of the Hip and THR <i>Assoc. Prof Azlina Amir Abbas</i>
1240-1400	Lunch Break
1400-1420	Biomechanics of Fracture Fixation <i>Dr C. Sankara Kumar A/L Chandrasekaran</i>
1420-1440	Gait Lab and Motion Analysis <i>Prof. Ir. Dr. Noor Azuan Bin Abu Osman</i>
1440-1500	Cyclic Loading <i>Prof. Ir. Dr. Noor Azuan Bin Abu Osman</i>
1500-1520	Biomechanics of Spine and Fixation Methods <i>Assoc. Prof. Chris Chan Yin Wei</i>
1520	Tea Break and Closing Remarks
Day 2 : 8th May 2015 Hands on (Instron 3365 and 5848)	
Group 1: 0900-1200 Group 2: 1400-1700	