MIE 100S – DYNAMICS

January – April, 2017

(updated Feb 6, 2017)

1. Lectures schedule and location

Section number	Instructor	Lecture rooms	Office hours
LEC 01	Edmond Young eyoung@mie.utoronto.ca MC 313	M 11 am – noon (BA1180) W 11 am – noon (BA1180) R 11 am – noon (BA1180)	Wednesday 1-2 pm
LEC 02	Leslie Sinclair lsinclair@mie.utoronto.ca BA8112	T 4-5 pm (MC254) W 4-5 pm (MC254) F 4-5 pm (MC254)	Tuesday 1-2 pm
LEC 03	Lidan You youlidan@mie.utoronto.ca MC 316	M 3-4 pm (GB220) W 3-4 pm (GB220) F 3-4 pm (GB220)	Monday 1-2 pm
LEC 04	Anthony Sinclair sinclair@mie.utoronto.ca MC 415	M 5-6 pm (BA1170) W 5-6 pm (BA1130) R 5-6 pm (BA1170)	Thursday 1-2 pm
LEC 05	Anthony Sinclair sinclair@mie.utoronto.ca MC 415	M noon – 1 pm (MC252) W noon – 1 pm (MP134) F 2 pm - 3 pm (GB220)	Thursday 1-2 pm
LEC 06	Pierre Sullivan sullivan@mie.utoronto.ca MC 225	T 10 – 11 am (MC254) W 10 - 11 am (MC254) F 10 - 11 am (MC254)	Friday 1-2 pm

2. Final mark distribution

Final examination (Type D: aid sheet)	50%
Quiz, Jan 31 (Type D: aid sheet**) –** Covers chapter 11	15%
Midterm test - March 7 (Type D: aid sheet**)** - Covers chapters 11-14	25%
Online assignments	10%

3. Textbook and online access

Vector Mechanics for Engineers - Dynamics
F.P. Beer, E.R. Johnston, Jr., P.J. Cornwell, and B.P. Self
11th edition, McGraw Hill, 2013, ISBN: 978-0-07-768734-2

Online access to McGraw-Hill's *Connect* website: The website is used for weekly assignments (as described under item 11 below). Access codes are included if you buy an electronic or new hardcopy textbook. Alternatively, you can purchase the access code separately from the textbook at the University of Toronto Bookstore. The purchasing options are all included in section 11.

4. Course outline and approximate timetable

Textbook chapters	Topic	Lecture hours	Approximate Starting date*
Chapter 11 - omit 11.3	Kinematics of Particles	8 hours	January 9th
Chapter 12 - omit 12.1C, 12.3 **Chapter 13** - omit 13.2D, 13.4B **Chapter 14** - omit 14.3	Kinetics of Particles	10 hours	January 27th
Reading Week	sleep	-	Feb 20-24
Chapter 15 - omit 15.5, 15.6, 15.7	Plane Kinematics of Rigid Bodies	5 hours	February 27th
Chapter 16 **Chapter 17** - omit 17.1F, 17.3	Plane Kinetics of Rigid Bodies	9 hours	March 10th
Chapter 19 - omit 19.5B, 19.5C	Vibrations and Time Response	6 hours	March 31st

* Actual starting date may vary among the various lecture sections.

5. Quiz

January 31, 1 pm – 3 pm.
Room assignments will be announced on Blackboard closer to the date of the quiz.
The quiz will cover material in Chapter 11.

6. Midterm test

March 7, 1 pm – 3 pm.
Room assignments will be announced on Blackboard closer to the date of the midterm.
The test will cover material in Chapters 11-14.

7. Final examination

All material listed above in the course outline will be examinable.

8. Calculator

During the exam, midterm test, and quiz, students must use a non-programmable calculator:
Casio FX-991EX or Casio FX-991ES PLUS or Casio FX-991MS or
Sharp EL-520X or Sharp EL-520W

9. Email

For all emails regarding the course, start your subject with "MIE100 - ".
Example: "MIE 100 - Problems with *Connect*"

For all administrative queries, such as problems with McGraw-Hill's *Connect* web-site, re-marks on your quiz or midterm test: email mie100-admin@mie.utoronto.ca
For questions regarding technical course material, you can email your tutorial section TA's (names posted on BlackBoard), or see any one of the instructors or TA's during office hours.
If you have any technical issues accessing *Connect*, you can also contact *Connect* support:

http://www.mheducation.ca/college/helpticket/
Tele. 1.800.565.5758

10. Blackboard website

The course website can be found through the portal at *portal.utoronto.ca*

The course website will have available: contact information for your instructor and teaching assistants; some extra (not graded) problems and their solutions; midterm room assignments; details on the course outline and any announcements made in class. It will also have your quiz and midterm test grades listed. Students will be responsible for checking the course website to ensure that these grades have been recorded accurately.

11. Online assignments

This course requires the completion of weekly assignments. These will be accessible (and answers submitted) through the McGraw-Hill *Connect* website:

http://connect.mheducation.com/connect/login/index.htm?&BRANDING_VARIANT_KEY=en_us_default_default&node=connect_app_10_158

At the start of the term, use the instructions on page 5 of this handout to register for our course. Use the link below to be directed to the registration page and follow the instructions.

http://connect.mheducation.com/class/n-khalili-01_1

Be sure to use **your proper UofT registration name and UofT email address.**

Each Friday night, starting January 13th 2017, there will be a list of assigned problems, which must be solved and submitted on-line within 9 days (by next Sunday night at 11:59 pm). These problems will generate a different set of input data for each student and so copying from each other will not work, but you are encouraged to work with your friends and TAs (see tutorial information below) to fully understand the problem; this should then allow you to complete your individual calculations. You will be given up to 5 chances to enter the correct answer for each problem. This should give you sufficient opportunity to correct any small calculation errors and will be a good inspiration for thorough checking. Once the assignment is submitted, you cannot change your answers anymore.
If you must miss an assignment for any legitimate reason, a petition and supporting documents must be submitted to **the First-Year Office**.

12. Tutorials

Tutorials start on **Friday, January 13th, 2017.**

Section	Day of the week	Time	Rooms
TUT 01	Monday	9-11 am	WB 130
TUT 02	Monday	9-11 am	GB 404
TUT 03	Tuesday	10 am - noon	GB 404
TUT 04	Friday	1-3 pm	GB 304
TUT 05	Monday	9-11 am	SF 2202
TUT 06	Thursday	noon – 2 pm	GB 404
TUT 07	Tuesday	3-5 pm	GB 404
TUT 08	Friday	noon – 2 pm	GB 404
TUT 09	Friday	noon – 2 pm	SF 2202
TUT 10	Friday	4-6 pm	HA 403

At every tutorial, an old quiz or midterm or exam question will be distributed and students will have some time to work on it alone. This is intended to give you lots of practice under exam/test-like conditions. After this initial exercise, you will be free to continue working on the problem with your classmates and the TAs will be there to help. If there is a clarification needed for a large number of students, a TA will give a small presentation. Halfway into the tutorial, all students should have a firm grasp of the exam question and its solution.

Thereafter, the tutorial will be a work session for your assignments. Although answers must be submitted on-line, dynamics problems are best solved with a pencil and paper. You should bring a copy of your assignment to the tutorial (or a copy of the problems you are having difficulty with) where you will be free to work with your friends and get individual help from the TA's. Finally, the tutorial will serve as a time to get help with posted weekly suggested problems as well. The print version of the assignments will be enabled on the *Connect* website.

Please stick to your assigned tutorial section. You should get to know your TA's and desks are limited in all sections.

Your TAs will provide you with their email addresses during the tutorials. These will also be posted on BlackBoard.

13. Petitions for term course work

Petitions for special consideration for term work (quiz, mid-term test, or weekly assignments) must be submitted directly to the First-Year Office. Do not submit them to your TA or instructor.

14. Office hours

Office hours for instructors are on page 1 of this handout. You can also e-mail TA's or instructors for guidance, although face-to-face assistance is probably a better way to give a pictorial view of a Dynamics problem.

Instructions on the McGraw-Hill *Connect* web-site:

Purchasing Options (these prices apply at the UofT Bookstore):

Students are required to purchase a minimum of the online access to the assignments **(option 1)** for this course. However, option 2 costs only slightly more, and would give you access to an electronic textbook.

Options	Option 1	Option 2	Option 3	Option 4
What is included?	- online assignments	- online assignments - electronic textbook	- online assignments - electronic textbook - loose-leaf print of the textbook	- online assignments - electronic textbook - bound hardcopy of the textbook
Price (CAD)	$60	$79	$79 + $45 + S&H*	$159

* Shipping and handling

After you have purchased the access code follow the instructions below:

1. Go to the section web address below and click "**Register Now**"

   http://connect.mheducation.com/class/n-khalili-01_1

2. Enter the access code that you purchased at the UofT Bookstore (standalone or with the package)

3. Please ensure that you use your UofT (**@mail.utoronto.ca**) email address when signing up.

4. Complete the registration form using your official UofT registration name (this is your name as it appears on BlackBoard) and click "**Submit**". You are now registered.

   Please save this link to access your assignments for this course:

   http://connect.mheducation.com/class/n-khalili-01_1