

# **Pete Nellist – Practical Class Organiser (PCO)**

---

**M Eng Materials Science  
Practical Class Briefing**

**I hope you read the brief guide to practicals**

**Also see Course Handbook**

# Most importantly

---

- practicals are **COMPULSORY**
  - they again constitute “examinable coursework”
  - satisfactory performance in Practicals is required in order to pass Prelims and proceed to Part I
    - *normally need to achieve at least 40% (check Handbook when it is available) in practicals and have submitted your **practical book and a report for marking on each of the practicals** listed in the Handbook*
- ...of course, mitigating circumstances will be taken into account. See Course Handbook.

# Missing a practical / failing to submit a report

---

- you must inform the Education Manager (EM) if you miss a practical
- you must provide appropriate written evidence of a valid reason for missing a practical or failing to submit a report
  - *or if submitting late*in order to prevent penalties
- appropriate evidence includes
  - *a medical certificate to cover illness*
    - *details need not be specified by the doctor*
  - *a signed letter from your College Tutor to cover other matters*
- normally no later than one week later
- one copy to the EM and a second to the PCT
- assume your College will also require a copy to submit to the Proctors

# Safety in the Teaching Labs

---

- everyone's safety is our highest priority
- every effort has been made to make the labs safe
- however, there is also an obligation on YOU to help
- some **DOs** and **DON'Ts** follow, taken from the Handbook

# Safety and procedures

---

## •• DOs

- DO pay attention to the PCT and demonstrators
- DO read and follow safety instructions
- DO concentrate on what you are doing to avoid mistakes
- DO familiarise yourself with fire escape routes
- DO keep fire doors closed and escape routes clear
- DO wear appropriate eye and hand protection
- DO wash hands after working with chemicals
- DO work in a fume cupboard with etchants and solvents
- DO use minimum quantities of flammable liquids
- DO keep the labs clean
- DO speak in English at all times in the labs
- DO keep long hair tied back at all times

# Safety and procedures

---

## • DON'Ts

- DON'T eat, drink or put on make-up in the labs
- DON'T use your mobile phone
- DON'T mouth-pipette or lick things
  - - this includes sucking your pen!
- and a couple of “obvious” ones:
- DON'T mess around
  - - if you do, you'll be required to leave
- DON'T wear inappropriate clothing and shoes
  - - e.g. sandals, short skirts, long scarves
  - - you'll be asked to modify your dress or leave
- Note: it is important that the only language spoken in the Teaching Labs is English - whether that be student-to-student or demonstrator-to-student - such that if incorrect (and potentially unsafe) instructions are given, there is a better chance someone overhearing them will realise and be able to act.

# When and where

---

- Thursday and Friday afternoons 2-5pm  
Excepts weeks 1 and 2
- undergraduate Teaching Labs (Holder Building)
- expect one practical every other week
  - *half of you in odd weeks*
  - *half of you in even weeks*
  - *practicals in Trinity term arranged differently again*
- you'll mainly be working in groups of three
  - each group will have its own set of equipment in MT and HT

# Assistance while in the lab

---

- SD will usually be present at the beginning of the first afternoon and at times during the practical.

They will inspect your lab notebook and provide advice  
(varies somewhat depending on the requirements of  
the practical)

- Teaching Assistant (TA) and Practical Class Technician (PCT) present throughout



# Term timetable

MT Wk	YEAR 1 (Thur, Fri) [except Week1, when it is Tues-Fri]
1	1P1a, Intro to Computing ( <b>PJW</b> , Tauseef Ansari)
2	1P1b, Intro to Optical Microscopy ( <b>KAQOR</b> , SLP) TA: John O'Sullivan (Y3)
3	1P2, Intro to LabView ( <b>AARW</b> , Sebastian Bonilla)
4	TA: Lazuardi Pujilaksono (Y2)
5	1P3, Young's Modulus & Stress Analysis ( <b>J Marrow</b> , PDN)
6	TA: Jasper Singh (Y2)
7	1P4, Metallography ( <b>Shikang Feng</b> , tbc)
8	TA: Yingrui Zhao (Y3)

1P1 and 1P2 do not have laboratory notebooks assessed

1P3 is a formative assessment practical which requires a long journal paper report

# Week 1 – 1P1a

	Wed Week 1	Thu Week 1	Fri Week 1
1	Harvey, Rosie	Anstee, Ava	Gopal, Devajna
2	Hawley, Maddie	Chow, Anna	Hopkinson, James
3	Hillman, George	Guilfoyle, Oliver	Lee, Emma
	Liu, David	Monga, Avishi	Lee, Jing
5	Rasyiddin, Rizqullah	Puai, Xyn	Price, Ryan
6	Iyengar, Rohan	Yang, Zixuan	Schreiber, Atila
7	Long, Eden	Acquah, Jesse	Ngu, Kelvin
8	Sreter, Lili	Bolland, Ella	Sanderson, Murray
9	Wright, Anastacia	Harris, Eliza	Tu, Kephren
10	Zhang, Xi	Lu, Roger	Li, Yi
11	Hunn, Chris	Wu, Anna	Poh, Kai
12	Mcnab, Ben	Goodrick-Green, Abigail	Shenvi Kakodkar, Arya
13	Wong, Grace	Wang, Frank	Shorrocks, Samuel

# Timetables – Michaelmas Term

**Odd weeks**

Thursday Week 2 & Thurs & Fri Weeks 3, 5, and 7			
A1	Anstee, Ava MAN	Chow, Anna MAN	Guilfoyle, Oliver MAN
A2	Monga, Avishi MAN	Puai, Xyn MAN	Yang, Zixuan MAN
A3	Goodrick-Green, Abigail STA	Li, Yi STA	Poh, Kai STA
A4	Shenvi Kakodkar, Arya STA	Shorrocks, Samuel STA	Hunn, Chris CCC
A5	Mcnab, Ben CCC	Wu, Anna CCC	Wong, Grace CCC
A6	Wang, Frank CCC	Harvey, Rosie STC	Hawley, Maddie STC
A7	Hillman, George STC	Liu, David STC	Rasyiddin, Rizqullah STC

**Even weeks**

Friday Week 2 & Thurs & Fri Weeks 4, 6, and 8			
B1	Iyengar, Rohan SEH	Long, Eden SEH	Sreter, Lili SEH
B2	Wright, Anastacia SEH	Zhang, Xi SEH	Ngu, Kelvin SEH
B3	Gopal, Devajna QNS	Hopkinson, James QNS	Lee, Emma QNS
B4	Price, Ryan QNS	Schreiber, Atila QNS	Lee, Jing QNS
B5	Bolland, Ella TRI	Harris, Eliza TRI	Lu, Roger TRI
B6	Tu, Kephren TRI	Sanderson, Murray TRI	Acquah, Jesse TRI

# How your practicals will be assessed

---

- All practicals except 1P1a, 1P1b and 1P2 will have the lab notebooks assessed.
- In addition, selected practicals (1P3, 1P6 and 1P8) will require writing a report, which will be assessed (counting towards prelims). The report will be prepared as if it was a manuscript submitted to Acta Materialia. You will have 3 weeks to write a report.
- The first assessed practical will be formative, in order to provide feedback (1P3 Young's Modulus) on the lab notebook and the report

# Contribution of marks to Prelims

- 8 practicals will have the lab books assessed, contributing with 3 marks each (Total of 24 marks)
- 2 practicals will have their reports assessed, contributing with 13 marks each (Total of 26 marks)
- Total contribution to Finals: 50 marks, out of a total for Part I of 500.
- DMAC has decided that no unmoderated numerical marks will be released, but formative feedback will be released.
- Tutors will be made aware of there is any concern about your marks.

# **Your practical notebook**

---

- **Lab notebooks cannot leave the Teaching Labs**
- **Lab notebooks are the property of the Department**
- **Lab notebooks are made available to Examiners**

# Lab book feedback

---

	Comments and feedback
Completeness and conciseness of method description	
Data analysis and any preliminary error analysis	
Brief interpretation or comment on results	
Presentation and clarity	

# Full write-up assessment

---

- Title, abstract and Introduction – 2 marks
  - Description of methods used including methods of data processing and analysis – 3 marks
  - Presentation of results including the appropriateness of figures and data presented, and the use of errors where appropriate – 4 marks
  - Discussion and interpretation of results – 3 marks
  - Conclusions – 1 mark
- 
- Formative feedback electronically via Canvas
  - Make sure you are aware how to submit (Course Handbook)



**...and on a positive note**

---

- **The TATA Steel Prize  
of £250  
for the best performance in practicals**

# and finally...

---

- if in doubt about anything  
- just ASK