Full briefing of the Practical Class

- most of this information is also available in your Departmental Handbook
Most importantly

- practicals are again COMPULSORY
  - they again constitute “examinable coursework”

- satisfactory performance in Practical is required in order to pass Part I and proceed to Part II
  - 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 by the Proctors
You are starting Part I Finals NOW

- all practicals are a part of Finals
- their marks count towards Finals
- and therefore help determine your final degree classification…future job prospects…your future life etc!
- treat practicals as exams
  - you wouldn’t fail to turn up to an exam
  - you wouldn’t turn up late
  - you wouldn’t expect more time than others
    - which handing in late constitutes
  - you’d follow all the rules
  - you’d study hard and do your best
Procedures, rules and regulations

- because of the serious implications of failing to complete a practical we have put in place a series of procedures designed to catch problems early, such that they can be dealt with before they become critical

- other rules and regulations are in place to ensure your safety and to ensure the Department complies with Health and Safety Requirements

- you MUST follow all procedures and obey all rules and regulations
  - they are there for YOUR benefit

- failure to do so will get you thrown out of the labs
When and where

- Monday, Tuesday and Wednesday afternoons 2-5pm
- 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 be working in groups of two or three
  - each group will have its own set of equipment in MT and HT
When and where

- MT & HT groups work in parallel
  - six sets of equipment
  - two week cycle

- TT practicals are organised differently
  - use more specialised equipment, e.g. electron microscopes
  - we don’t have six sets of equipment
  - teams in series throughout weeks 1-8
# Timetables – Michaelmas Term

## Mon, Tues, Wed – weeks 1, 3, 5, 7

<table>
<thead>
<tr>
<th>A1</th>
<th>Aspinall, Jack MAN</th>
<th>Austin, Alexandra MAN</th>
<th>Milne, Tara MAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>Sylva, Matthew MAN</td>
<td>Yin, Yuxin MAN</td>
<td>Johnson, Sam MAN</td>
</tr>
<tr>
<td>A3</td>
<td>Francis, Gemma TRI</td>
<td>Humphrey, Sam TRI</td>
<td>Lynch, Matthew TRI</td>
</tr>
<tr>
<td>A4</td>
<td>Smythe, Dylan TRI</td>
<td>Wheatley, Laura TRI</td>
<td>Tan, Natalie MAN (MEM3)</td>
</tr>
<tr>
<td>A5</td>
<td>Chambers, Gil STC</td>
<td>Howe, Inigo STC</td>
<td>Liang, Jeremy STC</td>
</tr>
<tr>
<td>A6</td>
<td>Roberts, Will STC</td>
<td>Severin, Brandon STC</td>
<td>Wang, Tiffany STC (MEM3)</td>
</tr>
</tbody>
</table>

## Mon, Tues, Wed – weeks 2, 4, 6, 8

<table>
<thead>
<tr>
<th>B1</th>
<th>Deru, Joshua CCC</th>
<th>Fairclough, Tom CCC</th>
<th>Fung, Justin CCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2</td>
<td>Lim, YJ CCC</td>
<td>He, Henry QNS</td>
<td>Hodgson, Henry QNS</td>
</tr>
<tr>
<td>B3</td>
<td>Kench, Steve QNS</td>
<td>Zhou, Anita QNS</td>
<td>Andrews, Douglas STA</td>
</tr>
<tr>
<td>B4</td>
<td>Goode, Michael SEH</td>
<td>Lowe, Nathan SEH</td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td>Orbell, John SEH</td>
<td>Padovan, Oliver SEH</td>
<td>Kealy, Rachel STA</td>
</tr>
<tr>
<td>B6</td>
<td>Ramesh, Jit STA</td>
<td>Saxby, Claire STA</td>
<td>Strutt, Victoria STA</td>
</tr>
</tbody>
</table>
## Timetables – Michaelmas Term

<table>
<thead>
<tr>
<th>MT Wk</th>
<th>YEAR 2 (and MEM3) (Mon, Tue, Wed)</th>
</tr>
</thead>
</table>
| 1     | 2P2, Dislocations & Deformation (**AJW**, JTC)  
MS2  
TA: Sabin Sulzer (Y2) |
| 2     | 2P9, Steels (**Chris Salter**, TJM)  
MS2 + MEM3  
TA: 3\textsuperscript{rd} wk Ben Jenkins (Y2), 4\textsuperscript{th} wk Ghazi Syed (Y2) |
| 3     | 2P10, Materials Selection (**K Sundaram**, E Liotti)  
MS2 + MEM3  
TA: Shuqiu Wang (Y2) |
| 4     | 2P3, Casting (**KAQOR**, PSG)  
MS2 + MEM3  
TA: Julian Malisano (Y3) |
This term’s practicals and associated lectures

- Dislocations and deformation
  - Microplasticity (MT)

- Steels
  - Microstructures (1st yr) & Engineering Alloys (TT)

- Materials Selection
  - General interest & Engineering Alloys (TT)

- Casting
  - Microstructures (1st yr) & Phase Transformations (MT)

http://www.materials.ox.ac.uk/teaching/ug/ugpracticals.html
Starting a practical

- sign-in in the practical lab at the start of EVERY afternoon

- attend briefing from Senior Demonstrator
  - you are NOT allowed to start a practical before the briefing
  - covers the theory and practice of the experiment
  - safety issues
  - report requirements
  - arrangements for marking

- get your practical book time and date stamped
  - health and safety requirement & compulsory
  - failure to do so equals starting a practical without permission

- SD will usually be present on the first afternoon
  - contactable on the second and third

- TA and Practical Class Technician present throughout
Your practical notebook

- practical notebooks will be used whenever you are in the lab to record:
  - data
  - observations
  - results of any analysis

- following good practice in research and industrial labs, all entries should be legible, written in pen and if you make a mistake, just draw a line through it

http://colinpurrington.com/tips/lab-notebooks
Your practical notebook

- you can keep your practical notebook throughout term

- practical notebooks must be handed in to the Assistant to the Deputy Administrator (ADA) at the end of term

  NB. Toni Perrott, is our Interim ADA. We will have a new permanent ADA by the end of term

- practical notebooks are the property of the Department

- practical notebooks are made available to Examiners
Writing up your practical

- A report on each experiment must be *hand written* on *loose-leaf paper*.
- Computer-drawn graphs and tables, and photographs may be glued into the report but the text must not be typed, word-processed or photocopied.
- Each page of the report must give the page number and the total number of pages in the report e.g. page 3 out of 4.

- A report should be written by each individual student and NOT co-operatively by the practical group.

  - See Handbook for relevant section on Plagiarism.

- Follow the guidelines given by the SD and in the briefing notes.
Submission of reports

- practical submissions are to be made to the Assistant to the Deputy Administrator (ADA) for date stamping by 1pm on the **Wednesday** of the week after the starting date
  - otherwise it will be deemed to be late

- submissions comprise
  - your practical report (with numbered pages)
  - a photocopy of your complete report
  - your practical notebook

- ADA will be available in her office between 11am and 1pm on **Wednesdays throughout term**
  - do not expect her to be available at other times
Submission of reports

- practical submissions date stamped after 1pm on the **Wednesday** of the week after the starting date are:
  - late
  - will incur penalties

- ADA will pass your original report to the SD for marking

- the photocopy of your report will go on file, in case the original is lost
Submission of 8th week practical reports

• special arrangements in place
  • details will be sent by email before the end of term

• you will have to hand-in your practical notebook at the end of term, so make sure you photocopy any information you need to write-up your practical

• required to post the report to the DAA, Philippa Moss, by stated deadline
  • obtain proof of postage
  • suggest keeping a photocopy in case the original is lost in the post

• I’ll alternate which groups get practicals in 8th week - so everyone has to do this
Marking of reports

- PCT will help arrange a date and time for the SD to mark
  - usually within 2 weeks of submission

- you need to ensure you can attend
  - given other commitments

- PCT will put up a provisional list of marking sessions or you will be asked to sign up on WebLearn

- take your practical notebook to the marking session with you – and expect the SD to look through it

- SD will provide feedback and grade your report
  - marks are out of 10
End of term arrangements

- all work must be completed and handed in for marking before the end of term
  - exception for 8th week practicals

- practicals not marked during term will be marked in the following term

- practical books are the property of the Department and should be kept by the ADA over the vacation

- available practical marks will be sent to your College tutors towards the end of term
  - feel free to ask them for these marks and for their comments and feedback
Poster Competition

- in addition to your standard practical write-up, you will be required to produce a poster for the practical Materials Selection (weeks 5 & 6)

- guidance on preparing posters:
  9:30-11:00 Tues Week 5
  Hume Rothery Lecture Theatre
  by Adrian Taylor

- poster competition:
  4:00-6:00 Fri Week 7
  Holder Building Cafe
  with wine and nibbles
  prize for the best poster
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
The DOs

DO pay attention to the PCT and demonstrators
DO read and follow safety instructions
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 in the labs
...and the 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 my own, not in the Handbook

DON’T mess around
  - if you do, you’ll be thrown out
DON’T wear inappropriate clothing or shoes
  - e.g. sandals, short skirts, long scarves
  - you’ll be asked to modify your dress or leave
Absence during practicals

- you are required to sign-in to the labs any afternoon you are working there
  - it is your responsibility to do so

- a failure to sign-in constitutes an absence

- you are required to be present in the labs on all three afternoons, unless you have finished your practical

- if you miss a scheduled session your College tutor will be informed

- if you miss a practical you must inform the PCT of the reason as soon as possible
Missing a practical / failing to submit a report

- you must inform the DAA 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 DAA and a second to the PCT

- assume your College will also require a copy to submit to the Proctors
Penalties

- cheating is a Proctorial Offence
  - copying of another student’s work will be reported to the Proctors
  - they have the power to reduce the class of your degree

- penalties imposed by recommending that the Part I Examiners deduct marks from those awarded by the SD
  - starting a practical without permission – 4 penalty marks
  - late submission of report and practical notebook in the absence of legitimate mitigating circumstances – 1 penalty mark for each week or part of a week the report is late
  - if, within 4 week of the scheduled starting date a practical is not carried out, or within 4 weeks of the actual starting date the report and practical notebook are not submitted and completion date stamped, then a default mark of zero is awarded and no feedback is given
Penalties

- failure to turn up for an oral marking session without legitimate mitigating circumstances
  - student will forfeit the opportunity for oral feedback
  - a final opportunity will be made for the SD to mark the report
    - this requires the report and practical notebook to be submitted to the DAA
    - must be within 4 weeks of the start of the practical
  - 2 penalty marks
  - failure to book an available oral marking session will be treated as if an arranged session had been missed
  - if miss scheduled marking and don’t hand in report and practical notebook for “marking without benefit of oral feedback” within required time, get a default mark of zero
Penalties

- a practical marked without a completion date stamp
  - 1 penalty mark
  - exception if report marked within 7 days of the starting date and mark dated by the SD

- failure to hand in practical notebook at the end of term
  - 4 penalty marks

- the practical book is your responsibility during term
  - if you lose your practical book then inform the DAA asap
  - outstanding practicals must still be written up and marked
  - penalties will be decided by the Part I Examiners and Proctors
MEM

- MEM students carry out all nine practicals, but spread over two years
- have done five in the 2\textsuperscript{nd} year and will do 4 in the 3\textsuperscript{rd} year
- practicals in the 3\textsuperscript{rd} year are scheduled after the Team Design Project in weeks 1 & 2
Returning marked practical reports

• your marked report will be returned to you, normally at the point when you submit the report for the next practical.

• you must retain these reports in the blue folder provided as you are required to submit them to the examiners, together with your practical notebook
Submission to the Part I Examiners

- completion of all practicals is a requirement of Part I Finals
  - all marks contribute to Finals

- will need to submit reports and practical notebook to the Chairman of the Part I Examiners in the Honours School of Materials Science
  - c/o the DAA
  - for MS students: by noon on Tuesday of 2nd week of MT (3rd yr)
  - for MEM students: by noon on Tuesday of 2nd week of TT (3rd yr)

- see Handbook to read more about the Examination Regulations on satisfactory completion of Practical and other coursework
…and on a positive note

- The TATA Steel Prize of £250 for the best performance in practicals
Feedback from the Practical Labs

- your mark for each practical should be clearly written on your script when it is returned to you

- feedback may also come in the form of comments written on your script or verbally from the SD

- At the end of each term, your marks (including those for Crystallography) will be passed onto your Tutors. Your Tutors should discuss these with you at your end of Term meetings. If they don’t, please prompt them to do so.
and finally…

- if in doubt about anything
  - just ASK