Graduate Induction Course 2016

Adrian Taylor
Aims of course

• To introduce you to the Department’s:
  – staff
  – buildings
  – facilities

• To give you an overview of the structure of the course you are about to start

• To give you a chance to meet each other, and some of the other graduate students

• To help you get started with the rest of the term…
Support structure

- Supervision Team, Research Group & Dept. Advisor
- Joint Consultative Committee for Graduates (JCCG)
- Director of (Graduate) Studies & Grad Studies Secretary
- Graduate Studies Panel
- Head of Administration & Finance and Deputies
- Facilities Manager
- Technical Support, Reception Staff and Finance Team
- Confidential Harassment Advisors
- College Advisor
- Divisional Skills Training Officer
- MPLSD Grad School, Univ. Education Cttee. and Proctors
Handbooks and guides (also on web)

- **Graduate Course Handbook**
  - the Department’s guide
- **MPLSD PG Research Student Handbook**
- **EdC Notes of Guidance for Research Degrees**
- **Postgraduate Lecture & Training Course Synopses and Research Colloquia Details**
  - information on training and teaching
- **MPLSD Researcher Training & Development Opportunities Brochure**
- **Department of Materials Handbook**
  - where to find what you need (and who to ask!)
Forms/tasks that need to be completed

• Graduate questionnaire
  — your personal details + supervision team

• Risk Assessment
  — your safety in the type of work you will be doing

• Radiation protection form
  — arranging training for use of X-rays, lasers and radioactive materials

• Key application form

• Swipe card access (Fob for Begbroke)
  — to allow you access to building and labs/offices
Overview of the D.Phil. course

• First Year: Probationer Status
  — begin research
  — transferable career skills, research skills training, academic courses & broadening elements
  — progress report and informal viva
  — literature review

• Second Year
  — transfer of status exam
  — main research year
  — skills training, including research talk to Department

• Third Year (plus a further 6 months if funded for 3½ years)
  — completion of research and thesis submission
  — skills training, including poster competition

See “A DPhil. Diary”
Overview of the M.Sc. course

• First Year: Probationer Status
  – begin research
  – transferable career skills, research skills training, academic courses & broadening elements
  – begin research
  – progress report and informal viva
  – literature review

• Second Year
  – transfer of status exam
  – main research year
  – skills training, including research talk to Department
  – completion of research and thesis submission

See “A Two-Year M.Sc. by Research Diary”
Supervision Team

• **Supervisor(s)** — one will be your **Lead Supervisor**
  — main source of advice and guidance for your project
  — keeps a watch on your progress and reports to Dept, University and College (GSS: Termly on-line reports)

• **Departmental Advisor:**
  — should be familiar with your research area
  — there for help and advice if things go wrong

• **Deputy-supervisor** (appointed for laboratory safety):
  — Will be **either** one of your co-supervisors (not the lead)
    or your Dept Advisor
  — to give safety advice if supervisor(s) absent
Your supervisor(s):

• What you should expect from them:
  — help with planning your research programme
  — skills audit (what training and teaching you need)
  — regular discussions of your work and academic advice
  — feedback on progress (formal and informal)

• What they should expect from you:
  — conscientious working, according to their advice
  — follow Departmental rules at all times (e.g. safety)
  — keep them informed of problems in good time

It is important for you to arrange regular meetings
Project management arrangements

• Aim of the scheme:
  — to allow you as the student to take responsibility for the successful outcome of your research project by assessing expectations and progress throughout duration of your course and flagging up any problems

• Structure of scheme:
  — 6-monthly forms assessing progress and future aims

• Workshop explaining the scheme
  — Dr Paul Warren (NSG) & Dr Adrian Taylor Friday wk.4 12-4 (HRLT & 21BRCR): In advance you should draft PMF1
  — please consult with your supervisor for this
Research & Transferable Skills Training

- Safety (Dr Watt, wk1 MT)
- Project management skills (wk4 MT)
- Career-related skills (wk5 MT)
- Training for role of TA in the UG Practical Classes (wk5 MT)
- LabVIEW (HT)
- Presentation skills/PowerPoint/PPT for posters/Adv a/v skills, (HT)
- Writing skills, Lab notebooks, IPR & Patents (HT)
- Literature searching skills & Patent information skills (Wks 2 & 7 MT)
- Reference Management skills (HT)
- Workshop skills (throughout year)
- Microscopy skills (modular)
- Institute of Materials - Benefits of Membership (wk 4 MT)
- Poster Presentations (wk 8 MT & wk 6 HT)
- Teaching skills (a series of workshops)
- Technology & Knowledge Transfer (tbc, TT)
Transferable Skills Training

• Other skills training courses at University level
  — IT Services, MPLSD, OUCaS, Bodleian
  — Language Centre
  — Said Business School (‘Building a Business’ Course)
  — Scientific Computing for DPhil students

• GRAD CHALLENGE or VITAE National Grad School
  • Voluntary, preferably attend during summer of 2nd year

• Further information & links from MPLSD web site (GAP)
  • MPLSD Grad School welcome event 5.30pm Weds 12th Oct

• Keep a portfolio as a record of your skills training
## MPLSD GRAD SCHOOL TRAINING FRAMEWORK

<table>
<thead>
<tr>
<th>Category</th>
<th>Phase</th>
<th>Foundations Phase (0-12 months)</th>
<th>Intensive Research Phase (12-30 months)</th>
<th>Completion Phase (24+ months)</th>
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</thead>
<tbody>
<tr>
<td><strong>Transferable Career Skills</strong></td>
<td></td>
<td>Project Management</td>
<td>Research Talk</td>
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<td></td>
<td>Career Planning</td>
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<td>TA for UG Practicals - Training</td>
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<tr>
<td><strong>Research Skills</strong></td>
<td></td>
<td>Safety Induction Talk</td>
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<td>Poster Presentation</td>
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<td>Colloquia</td>
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<tr>
<td><strong>Academic Skills</strong></td>
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<td>Two assessed lecture courses</td>
<td></td>
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</tbody>
</table>
Transfer to D.Phil./M.Sc. Status

- Four threshold requirements for transfer from PRS
  - Passing of two assessed courses
  - Attend at least seven MT & HT colloquia
  - Satisfactory May viva (inc satisfactory report)
  - Satisfactory Literature Review

- Apply for Transfer of Status (form GSO.2)
  - Normally by early October 2017
  - Supervisor must be satisfied with your progress
  - Interview by two independent assessors (Nov 2017)
  - Form includes a summary of skills training attended
Broadening elements

• DPhil Examiners’ Rubric:
  – to satisfy themselves that candidates possess good general knowledge of research discipline

• Requirement to pass 2 assessed courses:
  – one of which must be ‘broadening’ not ‘deepening’
  – assessment by written work and sometimes classes/tutorials

• Look at ‘Postgraduate Lecture Synopses’ handbook
  – postgraduate teaching in Department (includes Yr.3 Options courses)
  – undergraduate teaching in Department (for graduates of other subjects)
  – interdisciplinary assessed courses (see GAP lecture list)

Check choices with supervisor/DoS in advance
First Year report and viva

• Report
  – 2,500 words on progress during first year
  – project timetable for completion (2, 3 or 3½ years)
  – Submit to WebLearn by noon on Mon Wk0 TT17
  – **Warning**: see section 21 of handbook, on plagiarism

• Viva (informal)
  – 5 minute presentation (using visualiser)
  – 10 minutes questions & discussion (and advice)
  – Friday 9am – 6pm on 12th, 19th & 26th May 2017
  – Feedback
  – Letter from DoS after viva
Literature review

- 7,000 - 10,000 word survey of your research field
- Aim: to familiarise yourself with the topic area
- Feedback from a member of staff:
  - overall standard
  - breadth of coverage
  - critical judgement shown
  - style and presentation
- Submit to WebLearn by 30 September 2017
- Taken into account for Transfer of Status Exam
- IoM$^3$ prize offered for best Materials Literature Review from graduate students studying in UK
Transfer of Status Examination

• Apply to be considered for Transfer (October 2017)

• Formal Interview (15 to 30 minutes)
  – Conducted in November 2017 by two assessors (not your supervisor(s) or Dept Advisor)

• Details provided in 2016/17 Graduate Course Handbook
Confirmation of D.Phil. Status

• Threshold requirement for confirmation of status
  – satisfactory presentation on research progress to all members of the Department (Tues, Wed & Thurs week 7 HT, 9am-6pm)

• Apply for Confirmation of Status (form GSO.14)
  – including timetable for completion of thesis
  – requires satisfactory written report from student
  – requires support of supervisor
  – form includes summary of skills training attended
  – normally submit form by early October 2018

• Confirmation of Status Exam (Y3, timing tbc)
Second-year talks

- 9am-6pm, Tues, Weds & Thurs of Week 7 HT
  - 15 minute presentations (often PowerPoint)
  - 5 minute questions
- Written collective feedback from DoS after talk.
  - quality of visual aids
  - pace, diction, structure and timing
  - ability to get points across to peer-group
- Individual feedback from Supervisor and Peers
- Hetherington Prize awarded by Department for best talk in terms of preparation and presentation.
Third Year (for D.Phil students)

• Already you should have:
  — written Literature Review (one chapter of your thesis)
  — completed a significant amount of original work that will form a substantial part of your thesis
  — applied for confirmation of status
  — defined a timetable for the completion of your thesis within 12 months (3y funding) or 18 months (3½y funding)

• You should aim to be completing your research work SIX months before your funding expires and hence start writing your thesis in April 2019 (3y funding) or October 2019 (3½y funding)

• HT Poster Competition (RR & Ironmongers prizes)
• Continuation Bursaries
M.Sc. and D.Phil. examinations

• Examiners’ Rubric for D.Phil:
  — ‘To have presented a significant and substantial piece of research of a kind which might reasonably be expected of a capable and diligent student after 3 or at most 4 years of full-time study.’

• which External Examiners will interpret as:
  — ‘the D.Phil. thesis exhibits substantial evidence of original scholarship and contains material worthy of publication.’

• Examiners’ Rubric for M.Sc:
  — ‘to have made a contribution to knowledge or understanding of a kind which might reasonably be expected after 2 years of full-time study’.
Thesis write up and Viva

• Useful information on writing a thesis:
  – writing skills lecture (HT)
  – Postgraduates section of the Vitae website
  – MPLSD’s Graduate Student Handbook (procedures)

• After thesis submission, examiner will arrange viva
  – usually 2-3 months after submission
  – usually lasts 2-3 hours, where work is discussed in detail
  – examiners make a report to the University
  – corrections are often required before report submitted

• Need to deposit final hardbound copies with University and Department (for which Department offers a £30 contribution to costs) and e-thesis with Oxf Res Archive
Facilities

- Libraries
- Mechanical workshop
- Electronics workshop
- Heat treatment workshop
- Photographic/Imaging
- Specimen preparation
- Electron microscopes
- Optical microscopes
- X-ray diffraction facilities
- Stores
- Computing
- Materials Modelling Lab

See Dept Handbook (web-only) for full details of facilities and how to gain access and training…

See http://begbrokenano.materials.ox.ac.uk for details of the extensive materials characterisation facilities
Conference/Study Travel & Fees

• The Department expects that every student should have the opportunity to attend at least one conference
• Students are not expected to cover the cost of this (or other work-related travel themselves)
• Make funding arrangements **in plenty of time**
  — consult your supervisor
  — try College, conference, University and other sources
  — Department has some funding available (see form)
• Routine travel (e.g. to sponsor) should be funded from grants
• Transferable Skills training
  — EPSRC-funded students may apply to the DoS for funding
What to do next…?

• Settle in and get to know people!!

• Fill in forms with supervisor(s)
  – Graduate student questionnaire (inc. selection of Advisor)
  – Risk assessment form
  – Radiation Protection form
  – Key request form and swipe card access

• Compulsory lectures/workshops:
  – Safety (Dr Andrew Watt, wk.1)
  – Project management skills (Dr Adrian Taylor & others, wk 4)
  – Career Planning & Skills (Alumni of the Department, wk 5)
  – Training for role of TA in the UG Practical Classes (wk 5)

• Plan project and carry out skills audit
  – decide on what teaching/training courses to go to

• See DoS/Graduate Secretary if there are problems