Oxford MMathPhys/MScMTP

Week Four Exam Briefing

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Key Documents

- Course Handbook
- Examination Conventions
- Past Exam Papers
- Dissertation Guidance

All linked from Students section of MMathPhys webpage
https://mmathphys.physics.ox.ac.uk/students

Assessment of Courses

Assessment of units on the course takes several forms:

- Written invigilated exam
  Three exam periods: HT week 0, TT week 0, TT weeks 6-8.
- Take-home exam (*e.g.*, Collisionless Plasma Physics)
  Three days at end of Trinity Term.
- Mini-projects (*e.g.*, String Theory I, SUSY & SUGRA, Adv. Phil. of Phys.)
  Completed over roughly three weeks; deadlines depend on course.
- Dissertation
  Worked on throughout the year; submission deadline week 6 of Trinity Term.

formal assessments

- Homework Completion Requirement
  Homeworks submitted during term prior to classes.
  Some courses offered in homework completion mode or formally assessed mode.
  Groups & Representations requires both.

Assessment of Courses

Unit	Assessment Method	Assessment Instruction	Assessment Date	Submission Deadline	Homework Requirement	Units
Advanced Philosophy of Physics	mini-project **or** homework completion	N/A	titles released Friday wk 4 HT	12:00 Friday week 4 TT	yes for unassessed option only	1.5
Algebraic Geometry	1.75h inv. exam	best 2 questions count	week 6–8 TT	N/A	no	1
Algebraic Topology	1.75h inv. exam	best 2 questions count	week 6–8 TT	N/A	no	1
Anyons and Topological Quantum Field Theory	2h inv. exam **or** homework complation	answer 2 of 2 questions	week 0 HT	N/A	yes for unassessed option only	1
Differentiable Manifolds	1.75h inv. exam	best 2 questions count	week 6–8 TT	N/A	no	1
Field Theories and Collective Phenomena in Condensed Matter	3h inv. exam	answer 3 of 3 questions	week 6–8 TT	N/A	no	1.5
General Relativity I	1.75h inv. exam	best 2 questions count	week 6–8 TT	N/A	no	1
Groups and Representations	3h inv. exam **and** homework completion	answer 3 of 4 questions	week 0 HT	N/A	yes	1.5
Kinetic Theory	3h inv. exam **or** homework complation	answer 3 of 3 questions	week 0 HT	N/A	yes for unassessed option only	1.75
Numerical Linear Algebraic	1.75h inv. exam	best 2 questions count	week 6–8 TT	N/A	no	1
Perturbation Methods	1.75h inv. exam	best 2 questions count	week 6–8 TT	N/A	no	1
Quantum Field Theory	3h inv. exam	answer 3 of 3 questions	week 0 HT	N/A	no	1.5
Quantum Processes in Hot Plasma	homework completion	N/A	N/A	N/A	yes	0.75

[Examination Conventions pp.9-11]

Homework Completion

Solving homework problems (assessed or unassessed) is essential to your prospects of learning anything in this course.

The idea of "homework completion" requirement is:

- Homework is "low stakes", allowing you to engage with the material without undue worry about assessment or exam pressure/overload...
- ...but you still get some credit for doing it.

Homework completion is a pass/fail assessment.

You will "Pass" your homework completion course (or component in Groups & Reps) if you have achieved a passing mark (A/B/C) on 50% of the problems from **each problem sheet**.

[Examination Conventions p.3]

What Are You Required To Do?

You are required to offer at least **ten units** within the programme, where one unit normally corresponds to a 16-hour lecture course. More specifically, students are required to offer:

(a) at least **four units** that are assessed by written invigilated exams;

(b) at least **three further units** that are assessed by written invigilated exams or other formal assessment;

(c) at least **three other units** (homework only *or* formally assessed courses, including those with written invigilated examinations).

A dissertation replaces one—in the case of an extended dissertation, two—of the units in (b) or (c).

Please note that it is your responsibility to ensure that you fulfil the requirements for the overall number of units and the number of formally assessed units offered and completed.

N.B. If you are taking approved units, be sure you know the number of units your course is worth (agreed with Course Director Lionel Mason).

[Examination Conventions p.1]

How Are You Classified?

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Outcomes for all courses with assessment will be published as USMs. The object of the USMs is to allow direct comparison between the results of examinations in different subjects.

A course with formal assessment is considered **completed** if the USM of the course is $\geqslant 50\%$ and if any homework requirement has been completed. A course with no formal assessment is considered completed if the homework requirement has been completed.

[Examination Conventions p.6]

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Calculating the overall $\overline{USM}$

Let $\{c_1, \ldots, c_n\}$ be the set of formally assessed courses a student has offered. For each of these courses c_i, the number of units of the course is denoted by u_i, the number of units assessed by a written invigilated exam by w_i (zero if the course does not have a written invigilated exam) and the USM achieved by m_i. For a subset of these courses, given by an index set $S \subset \{1, \ldots, n\}$, we define the total number of units, $|S|$, the total number of units with written invigilated exam, $||S||$, and the average USM, $\bar{S}$, of this subset by

$$|S| = \sum_{i \in S} u_i \ , \qquad \|S\| = \sum_{i \in S} w_i \ , \qquad \bar{S} = \frac{1}{|S|} \sum_{i \in S} u_i m_i \ .$$

Exams marks may be scaled by Examiners

The $\overline{USM}$ is then given by

$$\overline{USM} = \max_{S \,:\, |S| \geqslant 7 \text{ and } \|S\| \geqslant 4} (\bar{S}) \ .$$

[Examination Conventions p.12]

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[Examination Conventions p.6]

A *Distinction* will be awarded if all of the following conditions are satisfied.

i) The candidate offers at least 10 units. These must contain at least 7 formally assessed units of which at least 4 units have a written invigilated exam.

ii) At least 10 units have been completed. In exceptional circumstances, the examiners may relax this requirement.

iii) $\overline{USM} \geqslant 70$.

In 2023-2024, 53 distinctions out of 86 students.

[Examination Conventions p.6]

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[Examination Conventions p.6]

A *Merit* will be awarded if all of the following conditions are satisfied.

i) The candidate offers at least 10 units. These must contain at least 7 formally assessed units of which at least 4 units have a written invigilated exam.

ii) At least 9 units have been completed. In exceptional circumstances, the examiners may relax this requirement.

iii) $\overline{USM} \geqslant 65$.

iv) The candidate does not qualify for a distinction.

In 2023-2024, 13 merits out of 86 students.

[Examination Conventions p.6]

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[Examination Conventions p.6]

A *Pass* will be awarded if all of the following conditions are satisfied.

i) The candidate offers at least 10 units. These must contain at least 7 formally assessed units of which at least 4 units have a written invigilated exam.

ii) At least 8 units have been completed. In exceptional circumstances, the examiners may relax this requirement.

iii) $\overline{USM} \geqslant 50$.

iv) The candidate does not qualify for a merit or distinction.

In 2023-2024, 14 passes out of 86 students; 6 students failed.

[Examination Conventions p.6]

Course Calendar & Exam Entry

Michaelmas Term (MT)

Tuesday 7th October (week 0)		Induction
Tuesday 14th October (week 1)	results for these to be released in HT; the rest in summer	MT lectures begin
Thursday 7th November (week 4)		Examination entry (HT invigilated exams)
Friday 6th December (week 8)		MT lectures end

Hilary Term (HT)

Monday 13th January (week 0)		Provisional start date for HT invigilated exams
Monday 20th January (week 1)		HT lectures begin
Thursday 30th January (week 2)		Examination entry (MT practicals, HT submissions, TT invigilated exams)
Friday 14th March (week 8)		HT lectures end HT mini-projects released
Friday 4th April (week 11)		HT mini-project submission deadlines

Trinity Term (TT)

Monday 20th April (week 0)		Provisional start date for first set of TT exams
Monday 28th April (week 1)	only for non-examined courses; HT deadline for all TT exams	TT lectures begin
Thursday 15th May (week 3)		Examination entry (HT/TT practicals, TT submissions)
Monday 2nd June (week 6)		Provisional start date for second set of TT exams
Monday 2nd June (week 6)		Dissertation submission deadline
Friday 6th June (week 6)		TT mini-project released
Friday 21th June (week 8)		TT lectures end
Monday 24th June – Wednesday 26th June (week 9)		TT take-home examination released between these dates
Wednesday 26th June – Friday 28th June (week 9)		TT take-home examination deadline between these dates
Friday 28th June (week 9)		TT mini-project submission deadline

[Course Handbook p.27]

Troubleshooting

Troubleshooting: Plagiarism

Depending on their severity, cases of suspected plagiarism may be referred to the Proctors for investigation or may be dealt with by the board of examiners. If dealt with by the board of examiners as a case of poor academic practice, the examiners may deduct marks (for lack of adequate referencing, poor use of citation conventions, *etc.*) of up to 10% of the marks available for the assessment. Where the consequence of the marks deduction would result in failure of the assessment and of the programme the case must be referred to the Proctors.

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See `http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism` for further guidance.

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It is a very bad idea to collaborate on a take-home exam, mini-project, or dissertation. It contravenes the honour code, it is easier to detect than you might think, and any suspected cases will be referred to the Proctors, who have the option of dealing with them very harshly.

[Examination Conventions p.5]

Troubleshooting: Withdrawal from Exams

Rules governing non-attendance at examinations and any consequent penalties are set out in full in the Examination Regulations (Regulations for the Conduct of University Examinations, Part 14).

If you will be prevented by illness or other urgent cause from attending one of their examination, you should contact your college office or college advisor as soon as possible.

Any case of non-attendance at an examination involving illness or other medical condition will require written medical evidence and will usually be referred by the college to the Proctors. If the Proctors do not believe there are satisfactory reasons for non-attendance, or an application to the Proctors has not been submitted, **a candidate will be awarded a mark of zero for that examination.**

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If you do not want to take an exam that you have entered for, withdraw from the examination (possible until the day before your exam, contact your college).

Do not fail to attend an exam that you have entered for and have not withdrawn from! For MMathPhys students, could result in course failure!

[Examination Conventions p.4]

Troubleshooting: Homework Withdrawal

For homework completion courses in MT and HT, the entry deadline is in the *following term.* There is unlikely to be a reason to consider withdrawing from these.

For homework completion courses in TT, you may withdraw *up until the submission deadline for the final homework assignment.*

For Groups & Representations, there is a single examination entry in MT. **The withdrawal deadline is the submission deadline for the final homework assignment.** Consequently if you fail the homework component of the course, you will not be able to withdraw from the written invigilated examination without special permission from the central university's Education Committee.*

**A careful reading of the course requirements will reveal that even in the event that you fail the course due to an incomplete homework requirement, an excellent performance on the written invigilated exam can still be a useful contribution towards your overall degree classification.*

Troubleshooting: Late Submissions

If you are prevented by illness or other urgent causes from submitting a dissertation, a take-home exam, or a mini-project on time, you should ask your college to submit an application for an extension to the Proctors on your behalf.

If the Proctors grant permission to submit work late, no penalty will be applied.

Work submitted late without prior permission may still be accepted for assessment, but the Examiners may apply a penalty of a reduction in the mark for the work.

Lateness	Penalty, % point reduction
Up to 4 hours	1 %
4–24 hours	10%
24–48 hours	20%
48–72 hours	30%
72 hours – 14 days	35%
More than 14 days late	Fail

Reduction is in max. marks available

You are advised to inform your college office or your college's Tutor for Graduates of any mitigating circumstances as soon as possible so that the college can make an application to the Proctors if appropriate.

[Examination Conventions pp.4-5]

Troubleshooting: Late Homework

If illness or bereavement affects your ability to meet a problem sheet deadline for a homework completion course, it is possible to apply for an extended deadline for submission, or to be excused from that specific problem sheet. Applications should be made online through a webform. Where the extended deadline requested falls before the class at which the work will be discussed, this will be sent to the lecturer for approval; where the extended deadline would fall after the class, or an excusal is requested, this will be sent to the Chair of Examiners for consideration.

[Course Handbook p.22]

Troubleshooting: Resits

A candidate who fails to satisfy the Examiners may retake the examination on at most one subsequent occasion at one of the next two opportunities. The examiners will specify at the time of failure which components of the examination may or must be redone.

- The student will not be eligible for a merit or distinction on the whole course.
- No student who has satisfied the examiners in the examination may enter again for the same examination.
- An MMathPhys candidate who resits a unit for which a technical fail mark was originally awarded (a unit for which no work was submitted or a written examination was missed) will have that paper assessed on its merits.
- An MSc candidate who resits a unit for which a technical fail mark was originally awarded (a unit for which no work was submitted or a written examination was missed) will have the mark for that unit capped at 50.

For more information, see Part 14 of the University Examination Regulations.

[Examination Conventions pp.6-7]

Questions?