

MPLS Divisional Board

Approved at the meeting of Physics Teaching Faculty Trinity Term 2018, MPLS Division Trinity 2018 and Education Committee July 2018

Title of Programme/ Name of Regulation

Honour School of Physics

Brief note about nature of change: major revisions to Part B syllabus

Location of change

(1) In *Examination Regulations 2018* <http://www.admin.ox.ac.uk/examregs/2017-18/hschoofphys/administratorview/>

Effective date

For students starting FHS from MT 2018, for first examination of Part B from 2019–20.

Detail of change

Amend citation references 3.1 – 3.33 as follows, new text underlined, deleted text struck through.

Part B for candidates on the three-year course

1. In Part B

(a) the candidate shall be required:

(i) to offer ~~four~~ three written papers on Physics, which must include B4 and B6, and

(ii) to submit to the Examiners such evidence as they require of the successful completion of practical work normally pursued during three terms in the academic year of the examination, and

(iii) to offer a written paper on one Short Option~~-,~~ and

(iv) to offer either an industrial project or two additional papers/project options which must include at least one of B8 and B9, and

(v) to offer a project report on practical work or other work undertaken in the academic year in which the examination takes place on a subject approved by the Head of the Teaching Faculty of Physics or deputy.

~~(b) a candidate may also offer a written paper on a second Short Option, in which case the candidate need only submit evidence of the successful completion of practical work normally pursued during one and a half terms of the three terms specified in cl. 1(a)(ii).~~

~~(c) to offer a project report on practical work or other work undertaken in the academic year in which the examination takes place on a subject approved by the Head of the Teaching Faculty of Physics or deputy.~~

~~(d b)~~ candidates may be examined by viva voce.

2. The titles of the written papers/project options of cl. 1(a)(i) and (iv) respectively are given in the Schedule below. Their syllabuses shall be approved by the Faculty of Physics and shall be published in the Course Handbook not later than the beginning of Michaelmas Full Term for the examination three terms thence. ~~The four papers offered shall include B3, B4 and B6.~~ Entry to options B8 and B9 is via application as outlined in the course handbook.

3. The list of Short Option subjects in cl. 1(a)(iii), ~~cl. 2~~ and their syllabuses shall be approved by the Faculty of Physics and shall be published in the Course Handbook not later than the beginning of Michaelmas Full Term for the examination three terms thence.

4. In cl. 1(a)(ii), practical work may be replaced by project work, if an appropriate supervisor is available. The subject, duration, and replacement value shall be approved by the Head of the Teaching Faculty of Physics or deputy, by the end of Michaelmas Full Term.

5. With respect to cl. 1(a)(iii) a candidate may take, as alternative to the written examination, an assessed course of instruction in a foreign language. A candidate proposing to take this alternative must have the proposal approved by the Head of the Teaching Faculty of Physics or deputy and by the Director of the Language Centre or deputy, by the end of the first week of Hilary Full Term. Approval shall not be given to candidates who have, at the start of the course, already acquired demonstrable skills exceeding the target learning outcomes in the chosen language.

6. With respect to subjects under cl. 1(a)(iii) a candidate may propose to the Head of the Teaching Faculty of Physics or deputy, not later than the fourth week of Michaelmas Full Term preceding the examination, another subject paper. Candidates shall be advised of the decision by the end of eighth week of that term.

Schedule

Physics (Part B)

~~Six papers, B1 to B6 as follows:~~

~~B1. Flows, Fluctuations and Complexity~~
~~B2. Symmetry and Relativity~~
~~B3. Quantum, Atomic and Molecular Physics~~
~~B4. Sub-Atomic Physics~~
~~B5. General Relativity and Cosmology~~
~~B6. Condensed Matter Physics~~

Six written papers, B1 to B6, and two project options, B8 and B9, as follows:

B1 – Fluids

B2 – Symmetry and Relativity

B3 – Atomic and Laser Physics

B4 – Nuclear and Particle Physics

B5 – General Relativity

B6 – Condensed Matter Physics

B8 – Computational Project

B9 - Experimental Project

Part B for candidates on the four-year course

1. In Part B

(a) the candidate shall be required

(i) to offer ~~five~~ six written papers/project options on Physics, which must include B4 and B6, and

(ii) to submit to the Examiners such evidence as they require of the successful completion of practical work normally pursued during the three terms preceding the examination, and

~~(iii) to submit to the Examiners such evidence as they require of the successful completion of practical work normally pursued during the three terms preceding the examination, and~~ (iii) to offer a written paper on one Short Option, and

(iv) to offer a project report on practical work or other work undertaken in the academic year in which the examination takes place on a subject approved by the Head of the Teaching Faculty of Physics or deputy.

~~(b) A candidate may also offer a written paper on a second Short Option, in which case the candidate need only submit evidence of the successful completion of practical work normally pursued during one and a half terms of the three terms specified in cl. 1(a)(ii).~~

2. The titles of the written papers/project options of cl. 1(a)(i) are given in the Schedule below. Their syllabuses shall be approved by the Faculty of Physics and shall be published in the Course Handbook not later than the beginning of Michaelmas Full Term for the

examination three terms thence. Entry to options B8 and B9 is via application as outlined in the course handbook.

3. The list of Short Option subjects in cl. 1(a)(iii), ~~1(b)~~ and their syllabuses shall be approved by the Faculty of Physics and shall be published in the Course Handbook not later than the beginning of Michaelmas Full Term for the examination three terms thence.

4. In cl. 1(a)(ii), practical work may be replaced by project work, if an appropriate supervisor is available. The subject, duration, and replacement value shall be approved by the Head of the Teaching Faculty of Physics or deputy, by the end of Michaelmas Full Term.

5. With respect to cl. 1(a)(iii) a candidate may take, as alternative to the written examination, an assessed course of instruction in a foreign language. A candidate proposing to take this alternative must have the proposal approved by the Head of the Teaching Faculty of Physics or deputy and by the Director of the Language Centre or deputy, by the end of the first week of Hilary Full Term preceding the examination. Approval shall not be given to candidates who have, at the start of the course, already acquired demonstrable skills exceeding the target learning outcomes in the chosen language.

6. With respect to subjects under cl. 1(a)(iii) a candidate may propose to the Head of the Teaching Faculty of Physics or deputy, not later than the fourth week of Michaelmas Full Term preceding the examination, either to offer another subject paper, or to offer instead a written account of extended practical work, in addition to that specified in cl.1(a)(ii). Candidates will be advised of the decision by the end of eighth week of that term.

Schedule

Physics (Part B)

~~Six papers, B1 to B6 as follows:~~

~~B1. Flows, Fluctuations and Complexity~~

~~B2. Symmetry and Relativity~~

~~B3. Quantum, Atomic and Molecular Physics~~

~~B4. Sub-Atomic Physics~~

~~B5. General Relativity and Cosmology~~

~~B6. Condensed Matter Physics~~

Six papers, B1 to B6, and two project options, B8 and B9, as follows:

B1 – Fluids

B2 – Symmetry and Relativity

B3 – Atomic and Laser Physics

B4 – Nuclear and Particle Physics

B5 – General Relativity

B6 – Condensed Matter Physics

B8 – Computational Project

B9 – Experimental Project

Explanatory Notes

The changes implement the structure and syllabus of the new 3rd year (Part B) of the physics course. All papers save two are now optional, and the course now features the optional experimental and computational projects. The syllabus was revised to allow greater in-depth teaching rather than an increase in content and to ensure a stronger focus on the importance of experimental work. The option to replace practical work with a second short option at Part B was removed. The changes also correct a clause that was mis-numbered.