Examination Timetabling policy

PURPOSE

This document articulates and clarifies College policy about the planning, preparation, production, publication and ongoing management of changes to the Examinations Timetable at College.

More specifically, it acknowledges the wide range and diversity of examination requirements across College and the relative lack of shared processes, norms and tools to coordinate effective and efficient timetabling across Departments. To that end, this policy seeks to achieve common standards – where practicable – in order to guide development of tools and systems to better support staff involved in the preparation and maintenance of examination timetables.

This policy provides definition and interpretation of the College Space Policy Framework¹ and should be read in conjunction with that framework, and with the College Space Sharing policy.

GOALS

The goals of this Examination Timetabling policy are:

- Provide clarity for students about what they should expect in their examination timetables
- Clarify minimum standards an exam room must meet in order to be deemed suitable.
- Clarify acceptable times, frequency and duration of examinations as received by any individual student, including for those students entitled to Additional Examination Arrangements
- Ensure no location related disparities of examination experience for each student sitting a given paper
- Provide coordinating mechanisms to enable the scheduling and rooming of examinations that result in all students being examined in suitable rooms during each Main College Examination Period
- Establish examination timetabling standards and norms within the College Timetabling System (see Appendix 4)
- Provide unambiguous clarity about how trade-offs between conflicting needs are resolved, in particular for largest cohort Examination Events needing the largest examination spaces
- Minimise overall administrative load placed on academic and support staff during examination timetable construction
- Align examination timetabling practices with expectations set out in College Learning and Teaching Strategy²
 - Promote transparency, measurable outcomes³ and continuous improvement for all examination timetabling activity

SCOPE

This policy applies to examinations of modules as follows:

- Modules for undergraduate taught programmes⁴
- Modules for postgraduate taught programmes
- Taught modules taken by MRes and PhD students
- Modules offered by Centre for Languages, Culture and Communications and Centre for Academic English – whether or not for credit

¹ https://www.imperial.ac.uk/a<u>bout/leadership-and-strategy/provost/space-policy/</u>

² Specifically, relevant items related to Assessment and Feedback in section 5.1

³ To include quantitative quality metrics for the structure of the examination timetable

⁴ Including I-Explore modules

- Modules that are timetabled and assessed but otherwise not part of a degree programme (including Pre-sessional English, Academic English)
- Additional Examination Arrangements⁵
- Year in Europe students being examined at Imperial College
- Computer Based Examinations in a controlled and invigilated examination environment
- All physical spaces on all campuses used to hold these examinations
- Any 3rd party premises used to hold these examinations
- Examination resits
- Practical examinations including authentic assessment modes (such as PACES exams see Appendix 5)
- Online examinations <u>not</u> in a controlled and invigilated examination environment (see Appendix 6)

Agreed exclusions to this policy are:

- In class tests whether or not any credit is ascribed to participation or result
- Externally arranged examinations (e.g. national run examinations)
- Year in Europe students being examined at another university
- Coursework
- Viva for PhD students
- Summer school
- Exam paper preparation and verification
- Exam paper logistics including storage, putting out, collection and exam script custodianship
- · Selection and training of invigilators
- Responsibilities of invigilators with respect to academic regulations and examination procedures

DEFINITIONS

<u>Examination Event</u>: the date, time and location(s) in which a single examination paper is sat (after which time that paper is no longer suitable for assessment purposes).

<u>Computer Based Examination (CBE):</u> an Examination Event where the exam questions and answers are provided via a secured electronic device, and the event is conducted under traditional invigilated conditions.

<u>Practical Examination:</u> an Examination Event involving a context specific assessment with standards specified by the Lead Examiner – includes authentic assessment modes.

<u>Examination Venue</u>: either a single room or a logical collection of rooms that are operated in conjunction with each other for the effective delivery of an Examination Event.

<u>Examination Room</u>: a single room forming part of an Examination Venue meeting the standards as set out in Appendix 1 – Examination Room Standards (for traditionally invigilated examinations), Appendix 5 – Practical Examination Rooms⁶.

⁵ http://www.imperial.ac.uk/disability-advisory-service/

⁶ Including laboratories, PACES and rooms needed for other authentic assessment modes

<u>Additional Examination Arrangements</u>: adjustments to the examination conditions, duration and/or procedures for students entitled to modifications based on an approved⁷ learning support and/or medical need.

<u>Viable Examination Schedule:</u> the day, time, and provisional room(s) (unpublished) that covers the entirety of a Department's⁸ examination requirements for all of their enrolled students, and including cross departmental teaching⁹.

Student Examination Timetable: the complete schedule including designated rooms of all Examination Events for an individual student. Includes the information¹⁰ needed for each student to be able to attend the correct Examination Venue at the correct time for their examination, excluding only the individual seat allocation.

<u>Examination Session</u>: the period in which examinations are held, this currently being morning (AM) or afternoon (PM).

Consecutive Examination Sessions: defined as AM to PM (same day) or PM to AM (consecutive days)¹¹

<u>Seating plan</u>: the individual seating allocation for each student for the Examination Event.

<u>Staff Examination Timetable</u>: the complete schedule of Examination Events for an individual member of staff, containing details of each exam that they support.

<u>Departmental Examination Timetable:</u> the complete annual schedule of Examination Events for which a given Department is responsible, including all necessary resources such as students, rooms, seats, invigilators, and Lead Examiner(s).

<u>College Examination Timetable</u>: the logical aggregate of all Departmental Examination Timetables, that covers all Timetabled Events for all examined programmes, staff, students and facilities.

<u>College Main Examination Periods</u>: the 3 annual blocks of weeks when the majority of examinations are conducted, being the last week of Autumn term, the first 2 weeks of Spring term and the whole of the Summer term¹². During this time, room bookings for Examination Events take precedence¹³ above all other bookings.

<u>Departmental Examination Periods</u>¹⁴: the weeks of the year, as determined by each department, in which Examination Events are scheduled. These will normally be aligned with the academic terms¹⁵ of each year and will in all cases reflect the structure and schedule of the programme(s) run by that department.

<u>Departmental Resit Examination Period</u>: the week(s) of the year, as determined by each department, in which resit examination events are scheduled. This period will

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⁷ All approvals must by arranged via Disability Advisory Service

⁸ And including other teaching entities such as Schools, Institutes, and Non-Faculty Teaching Entities

⁹ Including BPES modules offered by the Business School, and Horizons modules offered by CLCC

¹⁰ Excludes seat allocation, invigilators, and Lead Examiner arrangements

¹¹ Excludes Friday to Monday as consecutive exam days

¹² As defined by Senate for each academic year, normally between end of Easter and end of June

¹³ Refer to College Space Sharing Policy and College Room Booking Policy

¹⁴ These may include additional weeks not included in the College Main Exam Periods

¹⁵ Refer to Academic Timetabling policy

be determined by the structure and schedule of the programme(s) run by that department.

<u>Examination Room Layout</u>: the maximum capacity layout¹⁶ of desks for each Examination Room, meeting standards set out in this policy.

<u>Lead Examiner</u>: member of academic staff with overall responsibility for the examination paper and for answering any queries in relation to it.

POLICY

- The arrangements laid out in this examination timetabling policy are specified and overseen by the College Examination Timetabling Manager, on behalf of the Academic Registrar; who is accountable for the integrity and effectiveness of arrangements described in this policy.
- 2. Under regular¹⁷ circumstances, every Student Examination Timetable should have:
 - a. Maximum duration of 3 hours for a single¹⁸ exam, excluding additional time provided as part of Additional Examination Arrangements
 - b. No additional time should be allocated for reading of exam papers
 - c. No more than 1 exam in Consecutive Exam Sessions for core subjects¹⁹
 - No more than 2 exams in Consecutive Exam Sessions for elective subjects²⁰
 - d. No more than 13 hours²¹ of exams (excluding extra time) in any one calendar week.
- 3. All Student Examination Timetables will be published in stages as follows:
 - a. Department Examination Period will be advised before commencement of each academic year, and visible in the Personalised Academic Timetable²²
 - b. Date and time of each Examination Event that falls within College Main Examination Periods will be published at least 10 weeks in advance of that Examination Event
 - c. Examination Room will be published at most 1 month in advance
 - d. Individual student seat allocations will be available on the day of the Examination Event, at the Examination Venue
- 4. Departmental Resit Examination Periods will be advised by Departments before commencement of each academic year. Scheduling of resit examinations will be based on the department period and volume of resit examinations. Whilst reasonable effort will be made to spread exam load for individual students, this period is not bound by policy item 2. Resit examinations schedule will be offered to eligible students at least 4 weeks ahead of the time of the 1st resit examination.
- 5. Departments will be responsible for producing²³ a Viable Examination Schedule, including the day and a provisional (and unpublished) examination start time and room allocation. This will form the input to an improvement process ensuring that

¹⁶ The definitive source of the approved layout is the Imperial College Location Inventory System (ICLIS)

 $^{^{17}}$ Exceptions to these circumstances are Departmental Resit Examination Periods and/or any other specific exceptions pre-authorised by the Academic Registrar

¹⁸ Excludes practical examinations that pedagogically require longer durations to demonstrate attainment

¹⁹ And including the case of 1 core subject and 1 elective subject

²⁰ Or alternatively a maximum of 6 hours of exams in case of high elective optionality and half modules

²¹ Allowing for 5 exams of 2.5 hours duration or 4 exams of 3 hours duration in a given week

²² Refer to <u>Academic Timetabling policy</u>

²³ Where module selection happens part way through term, a provisional schedule will be available based on projected student numbers

Examination Room allocations within the College Examination Timetable achieve the goals of this policy. These Viable Examination Schedules must be complete at least 3 months prior to the start of each of the three blocks compromising the College Main Examination Periods.

- 6. For each day during the College Examination Period, every Viable Examination Schedule will be reviewed in line with goals of this policy and where appropriate reroomed in accordance with the protocol set out in Appendix 3.
- 7. All rooms used for any single Examination Event should ideally be:
 - a. In the same physical building and floor
 - b. Not materially different in terms of working space for each student
 - c. Not materially different in terms of lighting, ventilation, and ambient noise
 - d. Equipped with examination screens (or equivalent) that are visible by all students displaying current time and examination end time
- Seat spacing in each room shall be according to the approved Examination Room Layout for that room as stored on ICLIS. In Examination Rooms for which there is no approved layout, seat spacing shall meet standards outlined in Appendix 2 – Room Layout Standards.
- 9. Suitable Examination Rooms for Additional Examination Arrangements will be determined on a case by case basis, in accordance with the agreed adjustments for the individual student. In cases where a room hosts multiple students, the layout and spacing of the room will be in accordance with the principles set out in Appendix 2 Room Layout Standards.
- 10. To ensure the integrity and fairness, each room constituting the Examination Venue for a given Examination Event, must operationally:
 - a. Be able to contact all other rooms
 - b. Have mechanism(s) for the immediate broadcast of answers to exam paper queries and / or amendments to all rooms (including rooms for Additional Examination Arrangements)
 - c. Respond to fire and security incidents equivalently and in unison within the affected location
- 11. All Examination Events should be scheduled in Departmental Examination Periods during normal College opening hours. Circumstances under which exams can be scheduled outside College opening hours are:
 - a. If teaching is normally outside College opening hours (e.g., evening classes)
 - b. If there is clear student benefit (e.g. Executive MBA students)
 - c. When an operational issue has prevented the scheduled running of an Examination Event, and it needs to be re-scheduled in order to permit progression and classification decisions in a timely fashion
- 12. Any number of Examination Events may be scheduled to run simultaneously into any given Examination Venue in order to make best use of scarce suitable spaces. To reduce the risk of any disruption, all Examination Events²⁴:
 - a. Must have the same start time
 - b. Should have the same duration unless agreed otherwise locally
 - c. Should have compatible examination instructions

²⁴ Approval of change to departmental practice to harmonise student experience in any given Examination Event will be via Academic Registrar

- d. Should have consistent arrangements for the role of Lead Examiner(s) for each paper
- e. Should have joint invigilation arrangements

- 13. It is the responsibility of each Department to ensure that the checked examination script is available at the Examination Venue in sufficient time for distribution²⁵ to desks prior to the students arriving at the Examination Venue.
- 14. In all cases, the Lead Examiner(s) will be immediately contactable (by the Lead Invigilator) and available to answer any arising questions for a period from 30 minutes prior to commencement of the Examination Event until 30 minutes after the end of the Examination Event.
- 15. Each Examination Room will have at least 2 invigilators²⁶. For exams above 50 students, there will be an extra invigilator for each additional 50 students or part thereof (as below):

Min 2 invigilators: 1-50 students
Min 3 invigilators: 51-100 students
Min 4 invigilators: 101-150 students
Min 5 invigilators: 151-200 students
Min 6 invigilators: 201-250 students

- 16. Practice about the role of academics and other teaching staff (including GTA's) in Examination Events varies significantly across College. The following practices are acceptable:
 - a. Be present in an Examination Room for the duration
 - b. Be present in an Examination Room for the first 30 minutes and then leave
 - c. Not be present in any Examination Room at any point
 - d. Be a designated and trained invigilator
- 17. It is expected that any issues that cannot be resolved by application of the principles and policy articulated here, will be resolved in the first instance by the departments/faculties concerned using existing mechanisms. However, where issues arise that cannot otherwise be resolved the escalation path (including delegates) is:
 - i. Academic lead for the programme
 - ii. Academic Registrar
 - iii. Vice Provost Education
 - iv. Provost
- 18. Formal incentives and sanctions about the administration of Examination Timetables are intentionally not defined. Rather, collegiate practices that facilitate the goals of this policy are encouraged, including:
 - a. Cooperation and coordination between departments in making best use of spaces suitable for examinations
 - b. Ensure that choice of planned rooms reflects best current estimate of number of students that will sit any given examination
 - c. Making visible and available to other departments suitable spaces for examinations via the College Timetabling System (see Appendix 4)

Review arrangements for this policy:

Effective date	July 2019
Last reviewed by	Peter Laskey, Examinations Timetabling Manager
Date of next revision	Annually in November ²⁷

²⁵ Or loading in the case of computer based assessments

²⁶ Except in the circumstance where the Examination Room has only 1 student sitting the paper

²⁷ In order to align with annual Academic Timetabling calendar (i.e., preparation of database for next cycle)

APPENDIX 1 – MINIMUM EXAMINATION ROOM STANDARDS

All Examination Rooms should aim to meet the following standards:

Verbal communication	Every exam candidate must be able to clearly hear instructions
	Where audio equipment is required, it will be tested when checking layout
Visual communication	Every exam candidate must clearly be able to see written Examination Event instructions
	Flipcharts and portable whiteboards are permissible in the absence of projection facilities
Visible time	Every exam candidate must be able to clearly see the Examination Event current time
	Additional clocks or a clock projection will be used across large rooms, and for split room examinations
	All Examination Event clocks will be set to the same time
Storage for coats and bags	There will be a designated space for students to store coats and bags for the duration of the exam
Noise levels	Examination rooms, by their nature, will not be completely silent.
	In the event of excessive noise above the ambient, a local protocol will be in place to identify and remove the source.
Lighting	Examination Room lighting will provide at least 300 lux at each desk
Temperature	Examination Room temperature must be reasonable, and in all cases at least 16°C. Temperatures in excess of 30°C are taken to be unreasonable
Access	There will be clear directions, signage and no barriers to access for any Examination Room that a student is timetabled to attend

In addition, for traditionally invigilated Computer Based Examinations, there will be sufficient working computers available at the Examination Venue for the conduct of the Examination Event.

Exceptions to the Examination Room standards may be agreed via the Academic Registrar, upon request, and so long as a clear explanation to students is made outlining the provisions being made to ensure they are not disadvantaged by the arrangement.

APPENDIX 2 – EXAMINATION ROOM LAYOUT NORMS

Guiding Principles

The purpose of the room layout norms is to define adequate spacing to ensure:

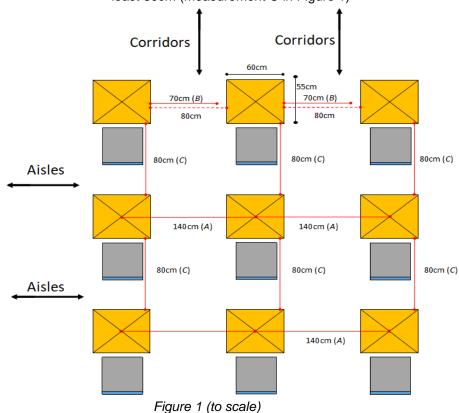
- 1. A fair and equitable exam experience for all students in any Examination Room
- 2. Adequate space such that each student not discomforted or constrained
- 3. Adequate privacy for individual students
- 4. Access for exam invigilators to move freely and easily between rows and columns of desks without disturbing examinees
- 5. Access for students to move freely and easily between rows and columns of desks without disturbing examinees (for example to visit the bathroom)
- 6. No student should be able to inadvertently or otherwise see detail of another examinee paper

Desk layout spacing norms

The spacing norm for room layouts using individual desks is represented in figure 1 below:

- 1. Desks used for examinations should be at least 60cm in width and at least 55cm in length
- 2. The measuring point from which a "student" is deemed to be is the midpoint of a minimum standard 60cm by 55cm desk
- 3. Distance between two students should ideally be 140cm (measurement A in Figure 1)
- 4. Distance between side edges²⁸ of desks (a *corridor*) should ideally be at least 70cm (measurement B in Figure 1)

Distance from rear edge of one desk to front edge (an *aisle*) of another should ideally be at least 80cm (measurement C in Figure 1)



Spacing norm for examinations held at benches

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²⁸ Note that student spacing (measurement A) and desks of minimum size result in a corridor that is 80cm wide

The spacing norm for room layouts using benches is based on that for individual desks, modified to accommodate additional access needs due to the lack of aisles:

- 1. Distance between two Students should ideally be 140cm (measurement A in Figure 1)
- 2. The distance from the rear edge of one desk to the front edge of another should ideally be a minimum of 100cm (as seen in Figure 2)
- 3. Physical dividers should be used to block examinee sight lines and help improve exam capacity for spaces otherwise restricted by bench furniture
- 4. Distance between two Students separated by a physical divider should ideally be 10cm between each minimum desk width (60cm), providing a reasonable degree of comfort with divider

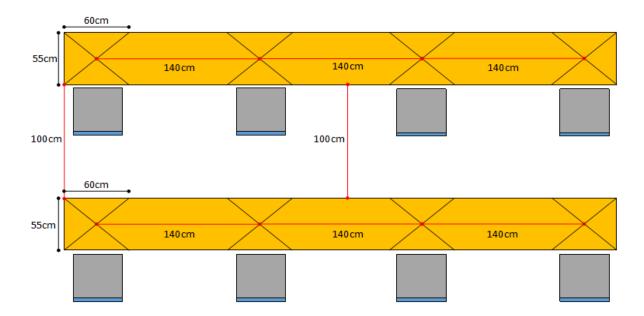


Figure 2 (to scale)

Allowable deviations

If better aggregate outcomes can be achieved against the guiding principles for room layouts, then it is permissible to reduce measurements A, B and C, either individually or in conjunction, by up to 10cm each.

Computer Based Examinations

The spacing norms indicated above apply to Computer Based Examinations, and are achieved by either:

- Allocating examinees only to computer desks that do not provide sight lines to other examinee screens; OR,
- Providing temporary physical dividers to block sight-lines between each examinee and all other examinee screens that would otherwise be visible.
- Suitable exam software security in place to remove access to internet, files/folders or nonexam software
- Back-up devices and power outlets available for any examination permitting students to bring their own device (BYOD – 'Bring Your Own Device' examinations)
- Technological support in place for BYOD examinations to 'health-check' student devices and ensure exam software compatible prior to examination

APPENDIX 3 – APPROACH TO ALLOCATING EXAMINATION VENUES

The following protocol is designed to achieve a balanced, fair, transparent, and objective room allocation.

This protocol will be applied to the College Main Examination Periods only.

QTR and Great Hall bookings for College Main Examination Periods will be managed by the College Examinations Timetabling Manager for all forward bookings. This includes any additional booking requests for the QTR and Great Hall outside of these periods.

The protocol is:

- 1. All examination room requirements for a given day will be reviewed with Departments and the combination that provides the greatest alignment to the goals of this policy will be selected subject to all exams in that combination:
 - a. Have the same start time
 - b. Have compatible starting instructions
 - c. Commit to having joint invigilation arrangements, to include designating a chief/lead invigilator for the venue
 - d. Have a consistent arrangement for the role of Lead Examiner for each exam in the venue

Any Examination Event that in previous year(s) was allocated into the Great Hall or Queen's Tower Rooms and is displaced through this protocol will be found a suitable alternative Examination Venue.

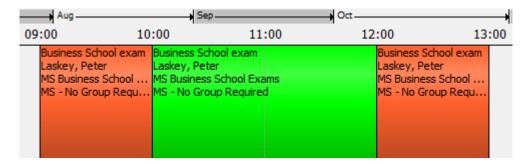
APPENDIX 4 – EXAMINATION EVENTS IN COLLEGE TIMETABLING SYSTEM (CELCAT)

EXAM EVENT CATEGORIES

- **Examination** Consisting of the total exam duration from start to finish
- **Set-up/take-down** For *set-up* prior to the Examination itself involving layout of exam materials etc and similarly in *take-down* following the Examination. This event category should also be used to cover any long period of exam furniture set-up or take-down required in a room e.g. Soft Services booking.
- Room Non-Availability (Published) Should be used to ensure reservation of a space during the main College exam periods, preventing any booking clashes. This should be adjusted or removed once exam events are known to reserve the space inbetween exam events as required.

ADDING AN EXAM EVENTS

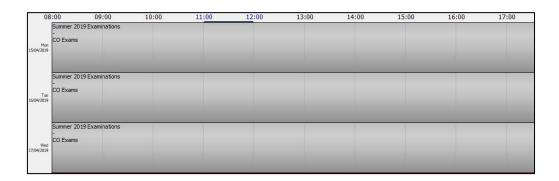
When adding an exam event, the 'Examination' *Event Category* should be used, creating a **green** event block. Time should be allocated for any exam *set-up* prior to the exam itself and the same for *take-down* creating an **orange** event block.



RESERVING EXAM SPACE (EXAM PERIODS)

The 'Room Non-Availability (Published)' *Event Category* should be used to reserve exam space.

Once exam timetabling is complete and exam events known, this reservation event should be adjusted or removed upon adding actual exam events.



Full guidance on Recording Exam Events in Celcat is available here.

APPENDIX 5 – PRACTICAL EXAMINATION NORMS²⁹

The guiding principles established in this policy (for traditionally invigilated examinations) should apply to practical examinations where appropriate.

Due to the nature of practical examinations the standards applied to these examinations are context specific and must be specified by the Lead Examiner for that Examination Event.

As a minimum, necessary equipment required to carry out the assessment should be in place. Students should also be informed in advance, of any equipment they are required to bring for the examination.

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²⁹ Including authentic assessment modes

APPENDIX 6 - NON-TRADITIONALLY INVIGILATED EXAMINATION³⁰ NORMS

The guiding principles established in this policy (for traditionally invigilated examinations) should apply to non-traditionally invigilated examinations where appropriate.

This is an emerging area which we envisage to mature over the coming years. Individuals considering use of non-traditionally invigilated examinations must consult with their local technology representative(s), the Digital Learning Hub, Examination Timetabling Manager and Academic Registrar.

Back-up measures should be considered and agreed locally in the event of any technological failure (e.g. alternative assessment).

³⁰ Including online proctored examinations