# Imperial College Timetabling Policy

Version 3, 05/03/2015

## 1. Introduction

**Purpose**

The purpose of this policy is to set out the rules, roles and responsibilities in relation to the annual planning, preparation, production and publication of the teaching timetabling at Imperial College London (the 'College').

Each policy item concerns the management of three key interdependencies: students, staff and space (esp. teaching rooms).

It is the goal of this policy and its operational products to make a positive contribution to the student and staff experience, and to improve space utilisation by establishing a common and coordinated approach to a largely distributed set of processes.

**Scope**

The policy covers all College campuses and focusses on any event planned or taking place within a teaching room, as defined below (section 6), during the academic year (see *Annual* - section 3).

Whilst this document is intended to provide a broad framework and guidelines for the widest possible application, it is recognised that a number of valid variations in terms of teaching patterns and practices exist across the College's Departments and Centres. These variations will be detailed by means of a set of supplementary protocols to be appended as this policy develops operationally.

## 2. College Timetabling Principles
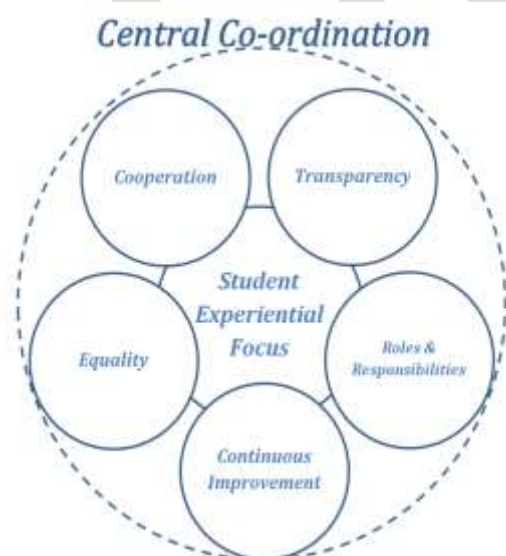


*Central Coordination* provides the institutional context for the operation of the principles. The Central Timetabling Support Office (CTSO), alongside other central service providers (e.g. ICT) will coordinate across all departments (section 9).

*Student Experiential Focus* lies at the heart of the academic timetable, informing both its construction (section 5) and publication (sections 8 & 10).

*Cooperation*, or *Collegiality*, relates directly to the need to increase space-sharing through departmental and College-wide initiatives (esp. sections 11 & 12; Appendix 1), but also to the development of communities of practice amongst stakeholders (section 9).

*Transparency*, in relation to the various processes associated with timetabling and the system of priorities established for the management of space, is a principle addressing the challenge of a multi-campus working environment, supporting and promoting the other principles (sections 8 & 12).

*Equality*, or fairness, ensures that no department or business unit is more important than another. Access to space is specified by means of a transparent system of priorities that reflect the College's requirements and support the student experience (see esp. sections 3-8).

*Roles & Responsibilities*, as a principle, underpins the establishment of roles and responsibilities in relation to data, systems, definitions and processes (section 9). Also implied is the desire to avoid duplication as well as adopt a 'single source of truth' approach to data management ('owners').

*Continuous Improvement* ensures that timetabling at the College remains fit-for-purpose year-on-year through the annual application of quality measures (esp. sections 6 & 11).

## 3. Temporal definitions

The College's temporal context for timetabling is described below.

- **Annual**
  Timetabling takes place in annual cycles from the start of July until the end of June, covering 52 weeks. Five times in every 28 years, there will be a 53 week year which will always follow the College term dates (see below) and is therefore determined by Senate (see *Termly*, below).

- **Termly**
  Terms describe standard delivery patterns within and across academic years. The College term dates are agreed by Senate:
  http://www3.imperial.ac.uk/registry/currentstudents/termdates.

- **Weekly**
  The College teaching week is Monday to Friday 09:00 to 18:00, except for Wednesday. On Wednesday there is no teaching from 12:00 for undergraduates and 13:00 for postgraduates and some undergraduate clinical courses. With the exception of some agreed programmes, Wednesday afternoon thereafter is reserved for student sport and society activities.

- **Daily**
  All taught sessions should start on the hour and finish at 10 minutes to the hour in order to allow session changeover and staff/student travel times.

Commercial activities are ordinarily booked outside of the standard teaching term and week. Local protocols are in force for those areas not following a standard termly delivery pattern (see *Termly*, above).

## 4. Global events

The following global events constrain departmental academic timetables:

- **Graduation**
  No teaching should be timetabled that will conflict with Commemoration day or Postgraduate Graduation ceremonies and prevent faculty attendance.

  Specifically, programmes attending the morning ceremony should keep the timetable clear until 15:00; programmes attending the afternoon ceremony should only timetable the morning; and programmes attending the evening ceremony should timetable no later than 16:00.

  The graduation timetable is published here:
  http://www3.imperial.ac.uk/graduation/graduationtimetable.
  The ceremony running order for each faculty is published here:
  http://www3.imperial.ac.uk/graduation/whichceremony.

- **Co-Curricular activities**
  All departmental timetables should make allowance for Co-curricular ('Horizons') activities during the timetable planning phase, as follows:

  - Year 1 Undergraduate – Tuesday 16:00-18:00
  - Year 2 Undergraduate – Monday 16:00-18:00
  - Year 3 Undergraduate – Thursday 16:00-18:00

- **College Closure Dates**
  No teaching should be timetabled on College Closure dates.  These are published here:
  http://www3.imperial.ac.uk/hr/procedures/leave/collegeclosures

## 5. Timetabling construction and room allocation

The following areas require consideration during the timetable construction and room allocation phases.  The successful implementation of these policy items will be evaluated after the start of term to inform continuous improvement of the policy and all related processes (see section 11).

**Student experience**

- Provision should be made within the timetable of each student for a one hour lunch break between 12:00 and 14:00.
- No student should be expected to attend more than three *consecutive* lectures and/or problem solving classes either side of their lunch break.
- Departments should make every effort to concentrate timetabled activities for individual students, wherever possible timetabling gaps at the ends rather than the middle of the day.
- Room allocations must take into account travel times between buildings and campuses.
- Where possible, room allocation for a particular class should be consistent *within the term*. This will also serve to simplify access control issues.

**Staff experience**

- Provision should be made within the timetable of each staff member for a one hour lunch break between 12:00 and 14:00
- Room allocations must take into account travel times between buildings and campuses.

**Demand Balancing**

- Each department should ensure that teaching sessions are spread as evenly as possible across the College teaching day, week, term and year (see section 3) in relation to resource requirements, i.e. no clustering of computer sessions at the end of the week or lectures at the start of term.  This will help to balance demand across the estate and facilitate space sharing, whether as part of a formal strategic initiative or as a tactical request for space.
- Where a teaching session runs over 2 or 3 terms, this should be divided into termly segments to offer greater flexibility when allocating space.

**Option Streaming**

- In order to offer student choice, departments should consider option streaming, i.e. continuing to offer a choice of options, but constraining the number of possible pathways taken.  Making certain options mutually exclusive (scheduled simultaneously) in this way helps to manage demand and safeguard supply (i.e. staff and room requirements, especially specialist).  This measure should be discussed at all departmental planning meetings at the start of the timetabling cycle and balanced with pedagogical and marketing considerations.

**Co-Curricular resource requirements**

- All programme timetables should take into account the Co-Curricular activities timetable (see section 4).  Additionally, each department should identify 3 teaching spaces that can be made available for each of the sessions.

## 6.  Teaching Rooms Defined

Teaching rooms are defined as spaces in which teaching takes place.  Teaching is here defined broadly as a class of timetabled event associated with an academic programme or module.  It may be interactive or didactic; staff or student-led.

All teaching rooms and the events taking place within them should be recorded on the central timetabling and room booking database (Celcat Timetabler) and *no other* system; in order both that students receive a complete teaching timetable and that the College can monitor space utilisation to inform master planning (see also Section 8).  Where this is not currently the case, departments should liaise with CTSO at the earliest opportunity to agree a plan to populate the room data on Celcat and to establish the appropriate booking permissions.

For the purposes of this policy, there are three sub-categories of teaching room, presented below in in decreasing order of flexibility:

- **General Teaching Room**
  These do not contain specialist equipment and are suitable for all types of general teaching, e.g. Co-Curricular 'Horizons' sessions etc.   This category contains lecture theatres and seminar/tutorial rooms as well as computer rooms not categorised as *semi-specialist rooms* (see below).

- **Semi-Specialist Room**
  A semi-specialist room contains equipment or resources vital for a specific programme or course, which consequently has a clear booking priority.  However, it may subsequently be suitable for teaching of a more general nature and rooms should be released for this purpose following initial allocations.

- **Specialist Teaching Room**
  These provide students with a specialist environment for teaching and may contain specialist equipment (e.g. labs, workshop rooms etc.).  Theses spaces are typically unsuited to general teaching, but *may* be suitable for teaching of a related specialist discipline.

## 7.  Teaching Room Etiquette

- Furniture should be returned to its original/default position at the end of each session.
- No food or drink (other than bottled water) should be consumed within teaching rooms.
- Any rubbish or teaching consumables should be removed from the room after use.

## 8.  Booking/Requesting space for teaching

Bookings and requests for teaching events should only be made via the central timetabling and room booking database (Celcat).  This will ensure that these events, once booked, can be output to student timetables and that the type of space use is properly recorded for reporting purposes.

Teaching activities are prioritised above non-teaching (but see also *Global Events*, section 4) until the end of May.  This is the deadline for the submission of all timetabled teaching requirements.  Where the detail of such requirements is not yet known, the use of contingency bookings and placeholder resources (e.g. new staff, new modules and final enrolment numbers) is permitted, providing that (a) estimates are realistic and evidence-based; and (b) that detailed information is provided and contingency bookings released *as soon as* accurate information is available.

## 9.  Roles and Responsibilities

- **Departmental Lead Timetablers (DLT)**
  Each department should identify a Lead Timetabler (and reserve) that will be the primary point of contact with the Central Timetabling Support Office, attending the Timetabling User Group meeting and disseminating any key updates to the department as necessary.  This role will also be a key contributor to the online community of practice, *Imperial Timetabling Community* (ITC)*.* DLTs are also required to take part in user acceptance testing (UAT) in respect of the rollover, upgrades and new software installation.

- **Departmental Room Bookers (DRB)**
  A number of staff are identified within each Department/Centre both to assist the DLT in relation to ad hoc teaching and also to manage requests for non-teaching activities.  DRBs may also participate in UAT as directed/delegated by their respective DLT.

- **Central Timetabling Support Office (CTSO)**
  The Central Timetabling Support Office (CTSO) based in Estates Facilities is responsible for coordinating and supporting the College's annual timetabling process and ensuring that departmental practices are aligned with developing College policy and standards.  The Office provides user support and training and manages user access to the College timetabling system and related software.
  With a strong customer focus, the office also provides a quality assurance service in order to facilitate data transfers and ensure that timetabling data and outputs achieve excellence for the student and staff end-user.

  CTSO works closely with ICT in relation to service planning and development, fulfilling a senior user role on behalf of the wider timetabling practice community; and undertaking user acceptance testing in relation to upgrades, roll-overs and new software/solutions.

## 10.  Timetable Publication

- **Staff Timetables**
  All teaching events should be associated with the appropriate teaching staff.  Where tutors rotate, this should be reflected as accurately as possible within the bookings (i.e. alternating weeks etc.).  Publication to teaching staff is via Celcat Calendar and iCalendar or AutoCalEx.

- **Student Group Timetables**
  During the initial timetabling phase – i.e. prior to the end of May deadline (see section 12) – *all* teaching events should be associated with student groups (e.g. Chemistry Tutorial Group 1a).  This will aid clash resolution during the input process, assist quality checking by academic staff in June and also allow the publication of group level timetables at the end of July.

- **Student Individual Timetables**
  Individual students are to be associated with groups during August and September in order to support the release of iCalendar students prior to the start of term (see section 12).  As these timetables are dynamic, it is vital that departments maintain groups and process cancellations and amendments throughout the academic year in progress.

In such cases where publication as described above is not possible on systems or resource grounds, the affected department/programme should work with CTSO to develop an implementation plan.

## 11. Measurement and review

**Metrics**

The following metrics will be developed for evaluating the quality of the annual timetabling process and its products:

| Metric | Description | Method |
|---|---|---|
| **Frequency** | The percentage of available slots used during the teaching day | Audit data and automatic people counting sensors; Celcat data |
| **Occupancy** | The percentage of available seats occupied | Audit data and automatic people counting sensors; Celcat data |
| **Utilisation** | Frequency x Occupancy | Audit data and automatic people counting sensors; Celcat data |
| **Student experience factors** | Lunch breaks, spread/clumping, travel, room consistency | Analysis of timetable data |
| **Student satisfaction** | Student perception of timetable quality | Feedback from NSS & Student-Staff Liaison Committees |
| **Staff experience factors** | Lunch breaks, travel | Analysis of timetable data |
| **Demand balancing measures** | Analysis of spread of resource requirements | Analysis of timetable data |
| **Data quality** | Data submission timeliness/completeness | CTSO records |
| **Timetable changes** | Amendments/cancellations/ new requests (ad hoc) | Local change log (departmental) |

Historical data will be available on the ITC Sharepoint resource for reference. Contact CTSO for access: https://share.imperial.ac.uk/cf/Timetabling/SitePages/Home.aspx

**Review**

The review process is managed by the Central Timetabling Support Office. Following the application of the above metrics, the findings will inform policy and process development for the following cycle. These will be issued to identified stakeholders (including Faculty Operating Officers) in the form of a concise report and list of actions.

Timetable quality statistics will be presented alongside room utilisation statistics drawn from physical and automated audit data to feed to provide intelligence for timetablers at the start of the session.

Minor changes to the policy and plan will be approved by the Head of Timetabling. Major changes will additionally require extended consultation as well as senior sponsorship and approval.

**Exemptions**

This Policy document has College-wide application. However, the heterogeneity of the College programme portfolio requires that consideration is given to applications for exemption from specific policy items. These must be made in writing to the Head of Timetabling in the first instance for attention during the annual review process.

## 12. Plan 2015/16

The following high-level plan presents the overall timescales and milestones for College timetabling activities in preparation for 2015/16 academic year.

This transitional plan paves the way for the more detailed schedule found in Appendix 1 (Booking prioritisation by Phases), which is proposed for the run-up to 2016-17, by establishing the key milestones around data entry, quality check, release of rooms and timetable publication.

| Month | Milestone |
|---|---|
| **February**[1] | CTSO[2] preparatory work (global events, classifications and categories etc.) |
| | Start of February Celcat 2015/16 database released to all departments |
| | Departments contacted concerning data rollover requirements |
| | Departmental timetabling commences |
| **March to May** | Departmental timetabling data input continues |
| | End of May deadline for completing departmental timetable (data input) |
| **June** | Mid-June timetable publication to departmental staff only (quality check) |
| **July** | Quality check amendments processed |
| | End of July timetable publication (to group level – see section 10, above) |
| | Release of departmental rooms (co-curricular, conference & events) |
| **August** | Submission of student and group data for iCalendar (continuing students) |
| **September** | Start of September iCalendar publication (continuing students) |
| | Submission of student and group data for iCalendar (new students) |
| **October** | Start of October iCalendar publication (new students) |
| | *Business as usual operations commence (start of standard term)* |
| **November to December** | Apply metrics (assess quality of timetable in relation to student satisfaction and space utilisation metrics) |
| | Release timetable quality summary to FOOs for dissemination/action |
| | Preparation for 2016-17 academic year commences |
| | New Celcat database, initiation of Kx (Conference & Events) interface, integrity checks (system testing & UAT) |

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[1] All months shown are in the 2015 calendar year.
[2] Central Timetabling Support Office

## Appendix A: Booking Prioritisation by Phases

The following model shows how booking priorities could be managed across the College by phasing from November 2015 onwards.

| | Phase 1 | | Phase 2 | | | | Phase 3 | Phase 4 | | Phase 5 | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | Phase 6 | |
| | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct -> |
| | Scheduled Booking Phase | | | | | | | | | Ad hoc Booking Phase | | |
| **Timetable events** | **Phase 1:** Scheduled Global events: Commemoration Day Open days Imperial Festival other events that support or enhance the student experience and/or have a clear reputational value | | **Phase 2:** Scheduled Teaching – teaching events forming part of the annual academic timetable as booked during the *annual timetabling window* | | | | **Phase 3:** Co-curricular and cross-departmental teaching not resolved in phase 2 | **Phase 4:** Advanced Commercial Activities and those scheduled events supporting knowledge transfer and other corporate objectives (incl. committee meetings, exam board prep & other departmental meetings). | | **Phase 5:** Ad hoc teaching – teaching activities arranged outside of the *annual timetabling window* and amendments to Phase 2/3 scheduled bookings; also ad hoc Conference & Events activities (subject to booking protocols) | | **Phase 6:** Other support activities (team meetings, one-to-ones etc). Possibly concurrent with Phase 5. |
| **Specific Activities & Milestones** | (Departmental Timetable planning activity) | | **End January -** New timetable database released to departments – ready for booking (planning activities also continue) | (Departmental timetabling data input period) | | **End April -** Departmental timetable booking ends | Cross departmental timetables (Horizons, shared modules, other cross-departmental issues) | **Start June –** departmental timetablers resolve outstanding issues (clash-checking etc.)  **End June –** staff to quality check draft timetable (Celcat Calendar, spreadsheets, web publisher) | **End July –** Timetable Publication (down to group level) – *subject to change disclaimer* | **August –** submission of student and group data for iCalendar (continuing students) | **Start September –** Release of iCalendar (personalised timetables) for continuing students  **September –** submission of student and group data for iCalendar (new students) | **Start October -** Release of iCalendar (personalised timetables) for new students  **October ->** amendments for current year (BAU) |

The **Plan 2015/16** located in section 12 is based on the more comprehensive model shown above (Appendix 1) concerning booking prioritisation by phases. The above model is proposed in the run-up to 2016-17; whereas the **Plan 2015/16** seeks to establish the key milestones by way of preparation.

Consideration should be given to the inclusion of Co-curricular in Phase 2, at such time as this can be supported by College booking processes.