

# **CLASSROOM TEACHING MODELS AT MIT**

---

**SUBJECT HIERARCHY**

**SECTION FORMAT TYPES**

**INSTRUCTOR ROLES**

**SUBJECT CONFIGURATIONS**

**DRAFT 4  
Rosanne Santucci  
March 7, 2008**

# SUBJECT HIERARCHY

---

The subjects at MIT are organized into a hierarchy. From highest to lowest, the hierarchy is:

## **Institute**

MIT itself.

## **School**

Uppermost division of the Institute into 5 schools (Science; Engineering; Humanities, Arts, & Social Sciences; Architecture; Sloan School of Management) and 1 college (Whitaker College of Health Sciences and Technology). There are also administrative units led by deans (e.g., Dean for Undergraduate Education, Dean for Student Life) which may serve the same function as School for our purposes; see Department, below.

## **Department (a/k/a Division, Section, Special Program)**

An entity within a school which is focused on a particular discipline and led by one or more heads. Typically identified by a number, e.g., 24-Linguistics & Philosophy, HST (division), ESD (division), 8-Physics, 21L-Literature, 6-Electrical Engineering & Computer Science. There are also special programs (e.g., freshman learning communities, ROTC) which are interdisciplinary or don't fall under a particular School; instead, they report to an administrative dean, and are treated like other Departments.

## **Program (a/k/a Course, Major)**

Major within a department/division/section. Typically identified by a number based on the department number, e.g., 24-2=Linguistics, 10=Chemical Engineering, 10-B=Chemical-Biological Engineering, 8=Physics, 24-1=Philosophy, 6-1=Electrical Science and Engineering, 6-3=Computer Science and Engineering.

# **SUBJECT HIERARCHY**

---

## **Subject (a/k/a course)**

This is a single course of study held during a particular period of time. A Subject is sometimes referred to as a course with a small c to distinguish it from Course, which at MIT is synonymous with Department (Course 6) or Major (Course 6-3).

## **Section (a/k/a class)**

Within a subject, a group of students led by one or more instructors and meeting at a distinct time and place. Examples are a Wednesday morning lecture, a Thursday afternoon recitation section, and a Friday afternoon recitation section. Sections can be subsections of other sections.

# SECTION FORMAT TYPES

---

MIT sections are classified in MITSIS as:



Lecture



Recitation



Lab



Design

## **Lecture**

In the traditional format, an instructor stands in front of all the students enrolled in the subject and literally lectures. The format could also be a seminar or interactive discussion.

## **Recitation**

Students meet in small groups for discussion, or to practice solving problems. In some subjects, for example 21M.341 Jazz Composition, there are no lectures, and recitations serve as seminars.

## **Lab**

Students gain hands-on experience with experiments or team projects.

## **Design**

Similar to a lab; terminology used only in Architecture Department. Students in design classes do final presentations which happen during finals period.

A single subject may have one or more of these section format types scheduled.

In the new Who's Teaching What, departments will be able to define custom section format names which will be mapped back to one of the four MITSIS format types.

# INSTRUCTOR ROLES

---

These roles and definitions are taken from the old (current) Who's Teaching What. In the new WTW, departments will be able to define custom roles which will be associated with a particular section format type.

## **Lecturer**

Individual in charge of the subject. Presents most of the material in class two or three times a week and/or is the head of a laboratory subject.

This role can be shared among two or more faculty. However, if all an individual does is present material a few times during the term, he or she is considered a Guest Lecturer, below. In cases where there are no large auditorium "lectures" per se (i.e., when there are only sections of the subject), the term Lecturer or seminar leader is used for the person who leads the section(s).

## **Lecturer — Section not known/scheduled**

This is the same role as Lecturer above, but is used when the lecture section has not been scheduled through the Registrar's Office.

## **Guest Lecturer**

One or more individuals who make guest appearances in lecture but who are not otherwise associated with the subject.

## **Recitation Instructor**

Individuals — e.g., faculty, graduate student TA's, or undergraduate TA's — who teach recitation sections. Some Recitation Instructors may also be Lecturers in the subject.

## **Recitation Instructor — Section not known**

This is the same role as Recitation Instructor, but is used when the exact recitation section is not known, has not yet been determined, or was added late and does not appear in the list of recitation times that is scheduled via the Registrar's Office.

# INSTRUCTOR ROLES (CONT'D)

---

## **Lab Instructor**

Individuals — e.g., faculty, graduate student TA's, or undergraduate TA's — who are involved in the teaching of individual lab subject sections.

## **Lab Instructor — Section not known/scheduled**

This is the same role as Lab Instructor, but is used when the exact lab section is not known, has not yet been determined, was added late, or for some other reason does not appear in the list of lab times that is scheduled via Registrar's Office.

## **Design Instructor**

Individuals— e.g., faculty, graduate student TA's, or undergraduate TA's — who are involved in the teaching the design sessions. Some departments refer to these Design sessions as "STUDIO".

## **Technical Instructor**

Individuals who are affiliated with subjects in some technical support capacity. These are usually staff members.

## **Tutorial Leader**

Individuals — usually graduate TA's or undergraduate TA's — who lead regularly-scheduled small group sections with class members who have been assigned to the tutorial.

Note that Tutorial Leaders are not "tutors" (see Other category below).

## **Other**

Use this category for teaching roles not otherwise covered above: e.g., coaches, tutors who staff open tutoring sessions, support TA's who prepare course materials, etc.

# INSTRUCTOR ROLES (CONT'D)

---

## NON-TEACHING ROLES

### **Responsible for grade sheet**

Also referred to as the “Grade Sheet Instructor,” this is the person whose name appears at the top of the grade sheet as printed by the Registrar’s Office. Typically this is the same person as the Lecturer, but for some types of subjects, it is a non-faculty employee who is also responsible for the administration of the course.

According to long-standing policy, this role cannot be assigned to a student — even if it is a graduate student who is fully responsible for teaching the class.

This name can also be updated using a MITSIS form, and is uploaded to and downloaded from the Registrar’s data.

### **Grader**

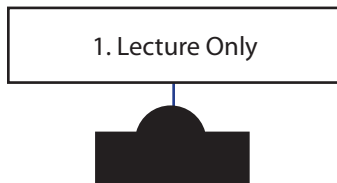
Individuals who assist with grading of papers, problem sets, and/or exams but who do not teach classes in the subject.

### **Administration**

Faculty or other members of the academic staff who oversee or assist with the administration of a subject. Sometimes called “course administrator.”

# SUBJECT CONFIGURATIONS

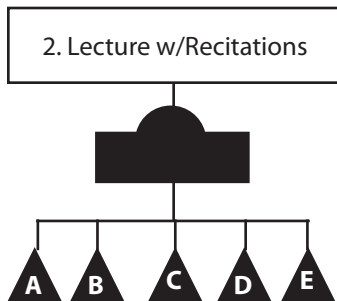
---



## INDIVIDUAL SUBJECTS

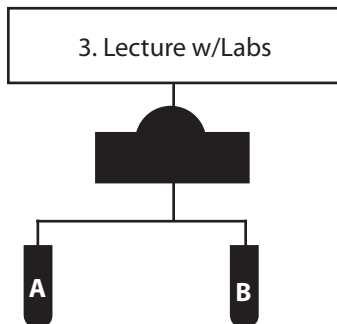
### 1. Lecture Only

The typical arrangement; most MIT subjects are structured this way.



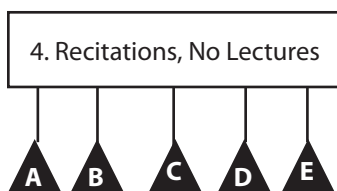
### 2. Lecture with Recitations

Also very common. All students are in the lecture, but are divided into recitation sections. The lecturer may also teach one or more recitation sections.



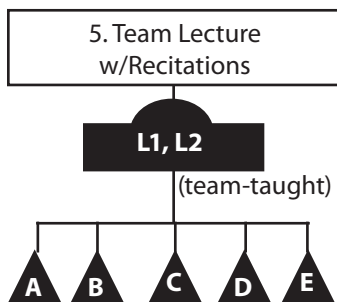
### 3. Lecture with Labs

Another common structure.



### 4. Recitations, No Lectures

In this model, the primary instruction happens at the recitation level. The recitation instructors thus function as lecturers or seminar leaders.



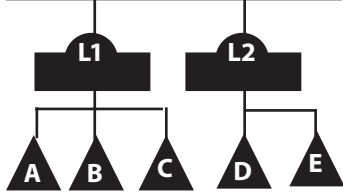
### 5. Team Lecture with Recitations

This is similar to #2, except that there are multiple lecturers (L1, L2) working together to present the same curriculum.



# SUBJECT CONFIGURATIONS (CONT'D)

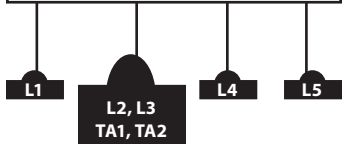
6. Multiple Lecture Sections with Dependent Recitations



## 6. Multiple Lecture Sections with Dependent Recitations

Unlike #4, the instructors do not team-teach — they are independent of each other. Recitation sections may be dependent on who the lecturer is.

7. Combination of Single & Multiple Lecturers



## 7. Combination of Single and Multiple Lecturers

Physics 8.01 (TEAL) has multiple instructors in a single section. Within the class, the instructors have a hierarchy, e.g., lecturers are above TA's.

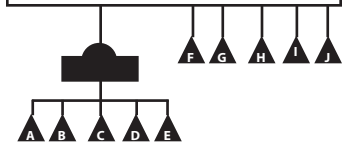
8. Lecturers/Recit Instrs Independent of Each Other



## 8. Lectures/Recitation Instructors Independent of Each Other

Primary instruction may happen in the lectures or the recitations.

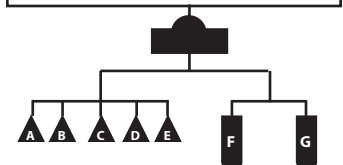
9. Lecture w/Dependent Recitations, plus Recitations that Function as Lectures



## 9. Lecture with Dependent Recitations Plus Recitations that Function as Lectures

E.g., 14.02.

10. Lecture w/Labs and Recitations

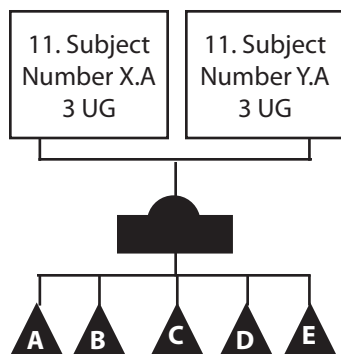


## 10. Lecture with Labs and Recitations

All students attend the lecture. They also take one of the recitation sections and one of the lab sections.

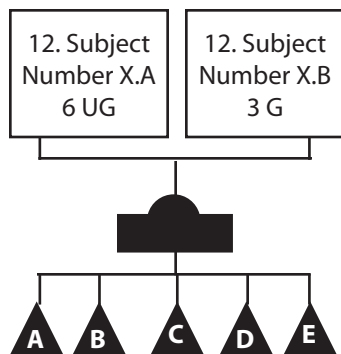
# SUBJECT CONFIGURATIONS (CONT'D)

## CLUSTERED SUBJECTS AND OTHER WEIRDNESS



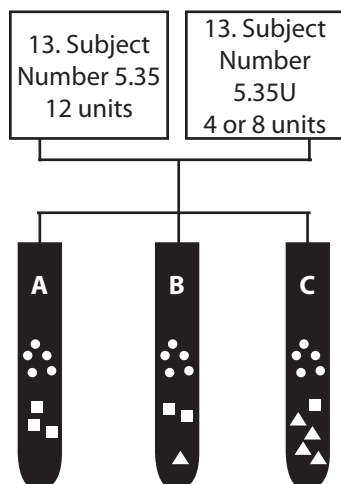
### 11. Joint

Two separate subject numbers typically from different departments; same curriculum, same number and type of units (e.g., 3 UG units) in each. Joint subjects have a "J" after the number, unless they're school-wide electives, which have no "J". (School-wide electives are proposed and sponsored by the school, whereas joint subjects are proposed and sponsored by individual faculty.)



### 12. Meets With (version 1)

Two separate subject numbers typically from the same department; different curriculum, different levels, sometimes different lengths, e.g. 6 UG units fall term and 3 G units 1/2 term.



### 13. Meets With (version 2)

The only example of this we know of is 5.35/5.35U. The curriculum for this "meets with" subject is structured as three 4-unit lab modules, which can extend across terms. Students enrolled in 5.35 take (or plan to take) all 3 modules, while those in 5.35U can take one or two modules.

Lab modules are not necessarily mutually exclusive; a student can be in multiple modules at the same time.

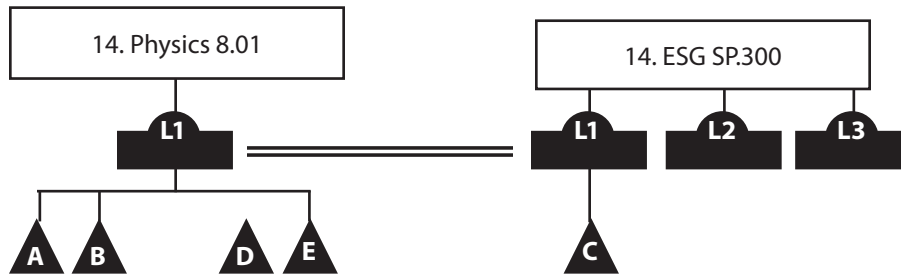
circles = 5.35 students  
squares, triangles = 5.35U students

# SUBJECT CONFIGURATIONS (CONT'D)

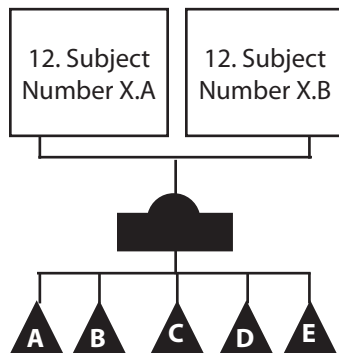
---

## 14. Meets With (version 3)

ESG is a freshman learning community in which students register for lectures in the science core subjects under one common subject number:



Instructors L1, L2, and L3 teach classes with very different curricula — Physics, Math, and Chemistry. Instructor L1 lectures in a class in front of two groups of students simultaneously; those enrolled in 8.01, and those enrolled in SP.300. However, recitation class C belongs under SP.300, while recitation classes A, B, D, and E are part of 8.01.



## 15. Unofficial cluster

Sometimes, two subjects will be offered at the same time, in the same place, with the same instructors and students — and yet, there is no official designation of Joint, Meets With, or School-Wide Elective. As far as the Registrar is concerned, they're two completely unrelated subjects. However, the instructors want them combined for evaluation purposes.