There are 30 Subjects in 3 Yrs. Law Programme and 50 Subjects in 5 Yrs. Law Programme. 30 Subjects in Law are common for both the programmes. However, there were 20 non-law subjects which are spared over the first three years of BALLB programme.

We need the programming of attendance for I-Yr. BALLB and 1st Yr. LLB in two divisions i.e. *Section – A and Section – B.*

From II – BALLB to V Yr. BALLB one section for 5 Yrs. Programme and 2nd Yr. LLB to 3rd Yr. LLB. one section for 3 Yrs. Programme.

Every day 5 lectures for each course will be conducted from morning 08:30 AM to 02:00 PM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **3 / 5 Yrs. LLB Programme Lecture Timings 1st Lec.** | **2nd Lec.** | **3rd Lec.** | **4th Lec.** | **5th Lec** |
| **08:30 AM** | **09:30 AM** | **10:30 AM** | **12:00 Noon** | **01:00 PM** |
| 6x1= 6 (5Yrs.)  4x1 = 4 (3Yrs.) | 6x1 = 6  4x1 = 4 | 6x1 = 6  4x1 = 4 | 6x1 = 6  4x1 = 4 | 6x1 = 6  4x1 = 4 |

We request you to design a programme for online attendance of the respective course students with a default of ABSENT and present will be filled while filling attendance.

The consolidated attendance of all the five subjects must be displayed as per the roll numbers of the respective class students Month Wise/ Day Wise / Week Wise be displayed by click of student roll number.

Example

G240001 - P P A P A

G240002 - A P P A A

G240003 - P A P P P

NG240012 - A P A P A

NG240013 - P P A A A

We are herewith enclosing the subjects of 3 and 5 Yrs. Law Courses and the sample attendance we are taking Lecture Wise (hourly) for your kind perusal and favorable consideration. It should also reflect the number of students present class / hour wise and consolidated statement of the same.

We solicit your cooperation in providing digital attendance as desired by Bar Counsil of India, New Delhi to full fill the mandatory obligation on the legal education centers.

**LLB – 3 Yr. Programme**

|  |  |
| --- | --- |
| **I – Semester** | **II – Semester** |
| Law of Contract I | Constitutional Law II |
| Constitutional Law I | Torts, Motor Vehicle Act and  Consumer Protection Act |
| Jurisprudence | Family Law II (Succession) |
| Family Law I (Family Relations) | Law of Contract II (Optional  Legal) |
| Banking Law Including  Negotiable Instruments Act | Social Research Methods  (Research methodology) |

|  |  |
| --- | --- |
| **III – Semester** | **IV – Semester** |
| Bhartiya Nyaya Sanhita | Bharatiya Nagarik Suraksha Sanhita |
| Property Law and Easement Act | Company Law |
| Labour Law I | Labour Law II |
| Administrative Law | Interpretation of Statutes  (Optional Legal) |
| Professional Ethics | ADR (Clinical Legal Edn.) |

|  |  |
| --- | --- |
| **V – Semester** | **VI – Semester** |
| Bharatiya Sakshya Adhiniyam | Civil Procedure Code and  Limitation Act |
| Principles of Taxation | Public International Law |
| Environmental Law | Intellectual Property Law |
| Land Laws including Tenure and  Tenancy Law | Insurance Law (Optional Legal) |
| Drafting, Pleading and Conveyance | Moot Court (Clinical Legal Edn.) |

**BALLB – 5 Yr. Programme**

|  |  |
| --- | --- |
| **I – Semester** | **II – Semester** |
| Principles of Political Science - I | Political Theory - II |
| Micro Economics - I | Macro Economics - II |
| Principles of Sociology - I | Theories of Sociology - II |
| General English | Local Language / Foreign Language  (Optional) |
| Legal Development | Constitutional Development |

|  |  |
| --- | --- |
| **III – Semester** | **IV – Semester** |
| Law and Literature | Legal Language and Legal Writing |
| Foundations of Political Obligations - III | International relations and obligations IV |
| Indian Economy - III | Economic Policies IV |
| Urban, Rural & Tribal Sociology of India - III | Contemporary issues of Sociology IV |
| Constitutional Law I | Constitutional Law II |

|  |  |
| --- | --- |
| **V – Semester** | **VI – Semester** |
| Local Self Government - V | Principles of Public Administration - VI |
| Jurisprudence | Torts, Motor Vehicles Act and Consumer Protection Act |
| Family Law I (Family Relations) | Family Law II (Succession) |
| Law of Contract I | Law of Contract II (Optional Legal) |
| Banking Law Including Negotiable Instruments Act | Social Research Methods  (Research methodology) |

|  |  |
| --- | --- |
| **VII – Semester** | **VIII – Semester** |
| Bhartiya Nyaya Sanhita | Bharatiya Nagarik Suraksha Sanhita |
| Property Law and Easement Act | Company Law |
| Labour Law I | Labour Law II |
| Administrative Law | Interpretation of Statutes  (Optional Legal) |
| Professional Ethics | ADR (Clinical Legal Edn.) |

|  |  |
| --- | --- |
| **IX – Semester** | **X – Semester** |
| Bharatiya Sakshya Adhiniyam | Civil Procedure Code and Limitation Act |
| Principles of Taxation | Public International Law |
| Environmental Law | Intellectual Property Law |
| Land Laws including Tenure and  Tenancy Law | Insurance Law (Optional Legal) |
| Drafting, Pleading and Conveyance | Moot Court (Clinical Legal Edn.) |

+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Thank you for providing the detailed document! I’ll rewrite the Django ORM from scratch for your Attendance Management System (AMS), incorporating the new details you’ve shared. The document outlines specific requirements for a 3-year LLB and 5-year BALLB program, including subjects, lecture timings, sections, and attendance tracking features. I’ll design the ORM to reflect these needs, ensuring it supports the programs, subjects, sections, timetable, and attendance requirements as specified.

**Understanding the New Requirements**

**Programs and Structure**

* **Programs**:
  + 3-year LLB (6 semesters).
  + 5-year BALLB (10 semesters).
* **Subjects**:
  + 30 subjects common to both programs (law subjects).
  + 20 additional non-law subjects for BALLB (Years 1–3).
* **Sections**:
  + Year 1 (BALLB and LLB): Two sections (A and B).
  + Years 2–5 (BALLB) and Years 2–3 (LLB): One section each.
* **Lectures**:
  + 5 daily lectures: 08:30 AM, 09:30 AM, 10:30 AM, 12:00 PM, 01:00 PM.
  + Each lecture is 1 hour (implied).

**Attendance Requirements**

* **Default**: Absent, marked Present during attendance filling.
* **Display**: Consolidated attendance by roll number (Month/Day/Week-wise).
  + Example: G240001 - P P A P A (P = Present, A = Absent).
* **Stats**: Number of students present per class/hour and consolidated statement.
* **Roll Numbers**:
  + BALLB: G24xxxx (e.g., G240001).
  + LLB: NG24xxxx (e.g., NG240012).

**Timetable and Subjects**

* **Timetable**: Fixed daily slots (5 lectures) for each course/section.
* **Subjects**: Listed per semester for both programs (30 law + 20 non-law for BALLB).

**Rewritten Django ORM (core/models.py)**

I’ll design the ORM to handle programs, sections, subjects, timetable, sessions, and attendance, with authentication linked to Django’s User model. Here’s the fresh implementation:

python

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from django.db import models

from django.contrib.auth.models import User

from django.core.exceptions import ValidationError

from django.core.validators import RegexValidator

*# Validate lecture time slots*

LECTURE\_SLOTS = [

('08:30:00', '08:30 AM - 09:30 AM'),

('09:30:00', '09:30 AM - 10:30 AM'),

('10:30:00', '10:30 AM - 11:30 AM'),

('12:00:00', '12:00 PM - 01:00 PM'),

('13:00:00', '01:00 PM - 02:00 PM'),

]

class Program(models.Model):

name = models.CharField(max\_length=50, unique=True) *# e.g., "BALLB 5 Yr", "LLB 3 Yr"*

duration\_years = models.PositiveIntegerField() *# 3 or 5*

def \_\_str\_\_(self):

return self.name

class Meta:

verbose\_name = "Program"

verbose\_name\_plural = "Programs"

class Section(models.Model):

program = models.ForeignKey(Program, on\_delete=models.CASCADE, related\_name="sections")

name = models.CharField(max\_length=10) *# e.g., "Section A", "Section B"*

year = models.PositiveIntegerField() *# 1, 2, 3, 4, 5*

def \_\_str\_\_(self):

return f"{self.program} - Year {self.year} - {self.name}"

class Meta:

unique\_together = ('program', 'year', 'name')

verbose\_name = "Section"

verbose\_name\_plural = "Sections"

class Subject(models.Model):

name = models.CharField(max\_length=100, unique=True) *# e.g., "Law of Contract I"*

is\_law\_subject = models.BooleanField(default=True) *# True for law, False for non-law*

semester = models.PositiveIntegerField() *# 1 to 10 (depending on program)*

def \_\_str\_\_(self):

return self.name

class Meta:

verbose\_name = "Subject"

verbose\_name\_plural = "Subjects"

class Teacher(models.Model):

user = models.OneToOneField(User, on\_delete=models.CASCADE) *# Authentication*

first\_name = models.CharField(max\_length=50)

last\_name = models.CharField(max\_length=50)

email = models.EmailField(unique=True)

phone = models.CharField(max\_length=15, null=True, blank=True)

def \_\_str\_\_(self):

return f"{self.first\_name} {self.last\_name}"

class Meta:

verbose\_name = "Teacher"

verbose\_name\_plural = "Teachers"

class Student(models.Model):

roll\_number = models.CharField(

max\_length=10,

unique=True,

validators=[RegexValidator(r'^(G|NG)24\d{4}$', 'Roll number must be G24xxxx or NG24xxxx')]

) *# e.g., G240001, NG240012*

first\_name = models.CharField(max\_length=50)

last\_name = models.CharField(max\_length=50)

email = models.EmailField(unique=True)

section = models.ForeignKey(Section, on\_delete=models.CASCADE, related\_name="students")

subjects = models.ManyToManyField(Subject, related\_name="students", blank=True)

def \_\_str\_\_(self):

return f"{self.roll\_number} - {self.first\_name} {self.last\_name}"

class Meta:

verbose\_name = "Student"

verbose\_name\_plural = "Students"

class Timetable(models.Model):

DAY\_CHOICES = [

('Monday', 'Monday'),

('Tuesday', 'Tuesday'),

('Wednesday', 'Wednesday'),

('Thursday', 'Thursday'),

('Friday', 'Friday'),

('Saturday', 'Saturday'),

]

section = models.ForeignKey(Section, on\_delete=models.CASCADE, related\_name="timetable")

subject = models.ForeignKey(Subject, on\_delete=models.CASCADE, related\_name="timetable")

teacher = models.ForeignKey(Teacher, on\_delete=models.SET\_NULL, null=True, related\_name="timetable")

day\_of\_week = models.CharField(max\_length=9, choices=DAY\_CHOICES)

start\_time = models.TimeField(choices=LECTURE\_SLOTS) *# Fixed lecture slots*

semester\_start\_date = models.DateField()

semester\_end\_date = models.DateField()

def \_\_str\_\_(self):

return f"{self.section} - {self.subject} ({self.day\_of\_week} {self.start\_time})"

class Meta:

unique\_together = ('section', 'subject', 'day\_of\_week', 'start\_time')

verbose\_name = "Timetable"

verbose\_name\_plural = "Timetables"

class Session(models.Model):

STATUS\_CHOICES = [

('Scheduled', 'Scheduled'),

('Completed', 'Completed'),

('Cancelled', 'Cancelled'),

]

timetable = models.ForeignKey(Timetable, on\_delete=models.CASCADE, related\_name="sessions")

date = models.DateField()

status = models.CharField(max\_length=10, choices=STATUS\_CHOICES, default='Scheduled')

def \_\_str\_\_(self):

return f"{self.timetable} on {self.date} ({self.status})"

class Meta:

unique\_together = ('timetable', 'date')

verbose\_name = "Session"

verbose\_name\_plural = "Sessions"

class Attendance(models.Model):

STATUS\_CHOICES = [

('Present', 'Present'),

('Absent', 'Absent'),

]

student = models.ForeignKey(Student, on\_delete=models.CASCADE, related\_name="attendance")

session = models.ForeignKey(Session, on\_delete=models.CASCADE, related\_name="attendance")

status = models.CharField(max\_length=7, choices=STATUS\_CHOICES, default='Absent')

timestamp = models.DateTimeField(auto\_now=True)

recorded\_by = models.ForeignKey(Teacher, on\_delete=models.SET\_NULL, null=True, related\_name="attendance\_records")

def \_\_str\_\_(self):

return f"{self.student} - {self.session} - {self.status}"

class Meta:

unique\_together = ('student', 'session')

verbose\_name = "Attendance"

verbose\_name\_plural = "Attendance"

class CalendarException(models.Model):

date = models.DateField(unique=True)

description = models.CharField(max\_length=100)

def \_\_str\_\_(self):

return f"{self.date} - {self.description}"

class Meta:

verbose\_name = "Calendar Exception"

verbose\_name\_plural = "Calendar Exceptions"

**Explanation of Changes and Additions**

**1. Program**

* **Purpose**: Represents the 3-year LLB and 5-year BALLB programs.
* **Fields**: name (e.g., "BALLB 5 Yr"), duration\_years (3 or 5).
* **Why**: Tracks the two distinct programs.

**2. Section**

* **Purpose**: Manages sections (A, B, or single section) per year and program.
* **Fields**: program, name (e.g., "Section A"), year (1–5).
* **Constraints**: Unique per program and year.
* **Why**: Supports Year 1 (A & B) and Years 2–5 (single section) as specified.

**3. Subject**

* **Purpose**: Stores all subjects (50 total: 30 law + 20 non-law).
* **Fields**: name, is\_law\_subject (to differentiate), semester (1–10).
* **Why**: Tracks subjects across semesters and programs.

**4. Teacher**

* **Purpose**: Represents instructors with authentication.
* **Fields**: Linked to User for login, plus personal details.
* **Why**: Teachers need secure access to mark attendance.

**5. Student**

* **Purpose**: Represents students with program-specific roll numbers.
* **Fields**: roll\_number (regex for G24xxxx or NG24xxxx), section, subjects (many-to-many).
* **Why**: Links students to sections and subjects; roll number format matches your example.

**6. Timetable**

* **Purpose**: Schedules lectures for each section.
* **Fields**: section, subject, teacher, day\_of\_week, start\_time (fixed slots), semester\_dates.
* **Constraints**: Unique per section, subject, day, and time.
* **Why**: Supports 5 daily lectures (08:30 AM–02:00 PM) per section.

**7. Session**

* **Purpose**: Represents individual lecture instances.
* **Fields**: timetable, date, status.
* **Why**: Tracks each scheduled lecture for attendance.

**8. Attendance**

* **Purpose**: Records attendance per student per session.
* **Fields**: student, session, status (default Absent), timestamp, recorded\_by.
* **Why**: Default Absent, marked Present as per your request; supports hourly tracking.

**9. CalendarException**

* **Purpose**: Manages holidays to cancel sessions.
* **Fields**: date, description.
* **Why**: Ensures holiday-adjusted attendance.

**How It Meets Your Requirements**

* **Programs/Sections**: Program and Section handle BALLB (Years 1–5) and LLB (Years 1–3) with A/B sections in Year 1.
* **Subjects**: 50 subjects (30 law + 20 non-law) stored in Subject, assignable via Timetable.
* **Timetable**: Fixed 5 lecture slots daily, configurable per section.
* **Attendance**: Default Absent, consolidated display possible via queries (e.g., G240001 - P P A P A).
* **Stats**: Aggregatable via Django queries (e.g., present count per hour).

**Next Steps**

1. **Setup Django**:
   * python manage.py makemigrations
   * python manage.py migrate
2. **Sample Data**:

python

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from django.contrib.auth.models import User

from core.models import Program, Section, Subject, Teacher, Student, Timetable, Session

*# Programs*

ballb = Program(name="BALLB 5 Yr", duration\_years=5)

llb = Program(name="LLB 3 Yr", duration\_years=3)

ballb.save(); llb.save()

*# Sections*

Section(program=ballb, name="Section A", year=1).save()

Section(program=ballb, name="Section B", year=1).save()

Section(program=ballb, name="Section A", year=2).save()

Section(program=llb, name="Section A", year=1).save()

*# Subjects (example)*

Subject(name="Law of Contract I", is\_law\_subject=True, semester=1).save()

*# Teacher*

user = User.objects.create\_user(username="john.doe", password="password123")

teacher = Teacher(user=user, first\_name="John", last\_name="Doe", email="john.doe@example.com")

teacher.save()

1. **API Routes**: I’ll rewrite routes once you confirm the ORM is okay.

**Feedback**

* **Details Okay?**: Does this match your vision? Any fields or relationships to add/remove?
* **Next**: Shall I proceed with API routes or tweak the ORM further?

Let me know what you think!