

Submission Guideline

1. Structure of the Course Data Class

The application uses a custom Kotlin data class named Course:

```
data class Course(  
    val code: String, val  
    name: String, val  
    credits: Int, val  
    semester: String  
)
```

- Code: Used for identification and sorting.
- Name: Displayed in UI and used for searching.
- Credits: Used in descending credit sorting.
- Semester: Used for semester-based filtering.

2. Filtering Implementation Logic

The RecyclerView list supports two types of filtering:

Semester Filtering

- Options: All, Fall, Spring
- Logic: “All” returns the full list; other options return only matching semester

Live Search Filtering

- Uses SearchView or EditText
- Filters as the user types
- Matches both course code and course name (case-insensitive)

Combined Filtering:

Both filters work together. The algorithm:

1. Start with originalList
2. Apply semester filter

3. Apply search filter
4. Update adapterList and call notifyDataSetChanged()

Sorting Implementation Logic

Two sorting options are implemented:

- (1) Sort by Course Code (Ascending)

Uses `list.sortedBy { it.code }`

- (2) Sort by Credits (Descending)

Uses `list.sortedByDescending { it.credits }` Sorting

applies ONLY to the currently visible filtered list.