```
import java.io.Serializable;
 2
     import java.time.*;
 3
     import java.util.ArrayList;
 4
 5
     public class CourseOffering implements Serializable
 6
     {
7
         private Lecture lecture;
 8
         private ArrayList<Tutorial> tutorials;
9
         private int expectedStNum;
10
         private Course course;
11
         private int year;
12
         private int semester;
13
14
         public CourseOffering(int expectedStNum, int year, int sem)
15
         {
16
             this.expectedStNum = expectedStNum;
17
             this.year = year;
             this.semester = sem;
18
19
             lecture = null;
             tutorials = new ArrayList<Tutorial>();
20
         }
21
2.2.
23
         public void addLecture(DayOfWeek lecDay, LocalTime lecStartTime,
                 int lecDur, Venue venue) throws ClashException, PreExistException,
24
                 LessonTimeOutOfBoundsException, UnsuitableVenueException
25
         {
26
             if(lecture != null)
2.7
28
             {
29
                 throw new PreExistException("Lecuture already exists");
30
             }
31
             if(venue.getPurpose() != Venue.Purpose.LECTURE)
32
33
             {
34
                 throw new Unsuitable Venue Exception ("Venue not suitable for a "
                          + "lecture");
35
36
             }
37
38
             // May throw clash exception
             lecture = new Lecture(lecDay, lecStartTime, lecDur, venue, this);
39
         }
40
41
42
         public Tutorial addTutorial(DayOfWeek tutDay, LocalTime tutStartTime,
                 int tutDur, Venue venue) throws ClashException,
43
44
                 LessonTimeOutOfBoundsException, UnsuitableVenueException
         {
45
             if(venue.getPurpose() != Venue.Purpose.TUTELAB)
46
47
                 throw new UnsuitableVenueException("Venue not suitable for a "
48
49
                          + "tutorial");
             }
50
51
52
             // May throw clash exception
             Tutorial tutorial = new Tutorial(tutDay, tutStartTime, tutDur, venue,
53
54
                     this);
55
             tutorials.add(tutorial);
56
57
```

98

```
return tutorial;
59
         }
60
61
         public Lecture getLecture()
62
63
             return lecture;
64
         }
65
         public ArrayList<Tutorial> getTutorials()
66
67
         {
68
             return tutorials;
69
         }
70
71
         public void setCourse(Course course)
72
         {
73
             this.course = course;
74
         }
75
76
         public Course getCourse()
77
         {
78
             return course;
79
         }
80
         public String toString()
81
82
         {
             String s = "";
83
84
             if(course != null)
85
                 s += "ID: " + course.getID();
86
87
                 s += "\nName: " + course.getName();
88
             }
89
             s += "\nYear: " + year + ", Semester: " + semester;
90
             s += "\nExpected student number: " + expectedStNum;
91
             if(lecture != null)
92
93
                 s += "\n" + lecture.toString();
94
             }
95
             return s;
96
         }
97
     }
```