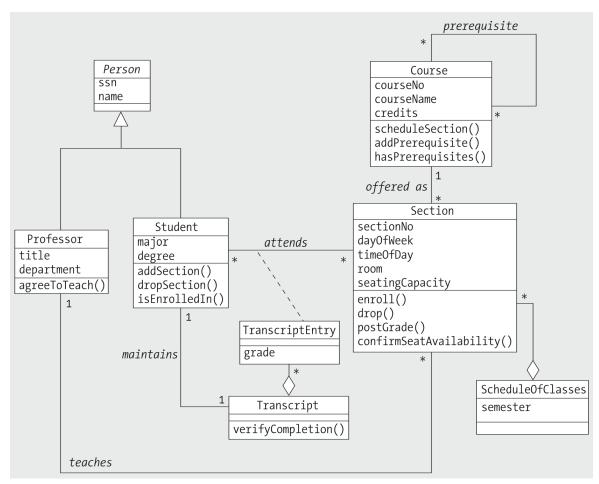
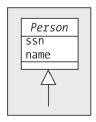
OOP - Lab 3

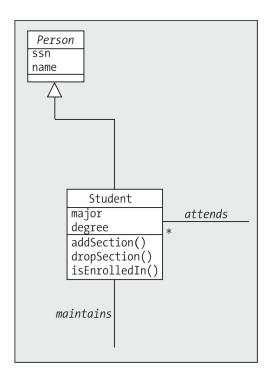
The SRS Class Diagram - Page 567



The Person Class



The Student Class



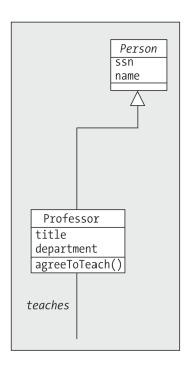
Attributes of Student

There are two attributes explicitly called out for the Student class in our UML diagram: major and degree. Student participates in two associations:

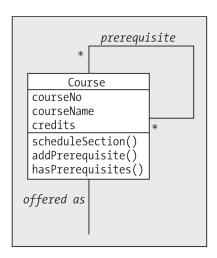
- attends, a many-to-many association with the Section class
- maintains, a one-to-one association with the Transcript class

and so we must allow for each Student to maintain handles on a single Transcript object and on many Section objects.

The Professor Class



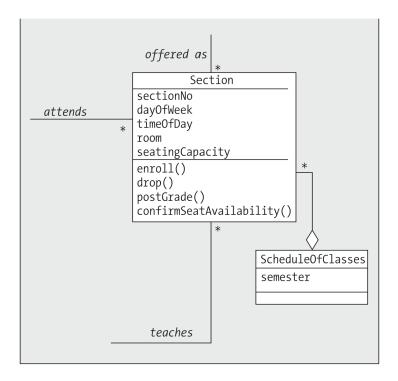
The Course Class



Course Attributes Referring back to the SRS class diagram, we see that Course has three simple attributes and participates in two associations:

- offered as, a one-to-many association with the Section class
- prerequisite, a many-to-many reflexive association

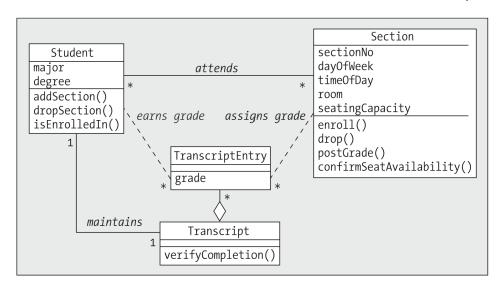
The Section Class



the Section class participates in numerous relationships with other classes:

- offered as, a one-to-many association with Course
- An unnamed, one-to-many aggregation with ScheduleOfClasses
- teaches, a one-to-many association with Professor
- attends, a many-to-many association with Student

The attends association is in turn affiliated with an association class, TranscriptEntry.



Let's say we want the displayCourseSchedule method to display the following information for each Section that a Student is currently enrolled in:

Course Schedule for Fred Schnurd

Course No.: CMP101
Section No.: 2

Course Name: Beginning Computer Technology
Meeting Day and Time Held: W - 6:10 - 8:00 PM

Room Location: GOVT202

Professor's Name: Claudio Cioffi

Course No.: ART101
Section No.: 1

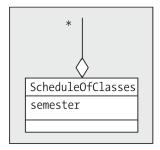
Course Name: Beginning Basketweaving

Meeting Day and Time Held: M - 4:10 - 6:00 PM

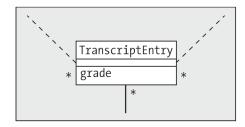
Room Location: ARTS25

Professor's Name: Snidely Whiplash

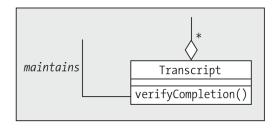
The ScheduleOfClasses Class



The TranscriptEntry Association Class



The Transcript Class



The Transcript class participates in two relationships:

• maintains, a one-to-one association with Student

• An unnamed, one-to-many aggregation with TranscriptEntry