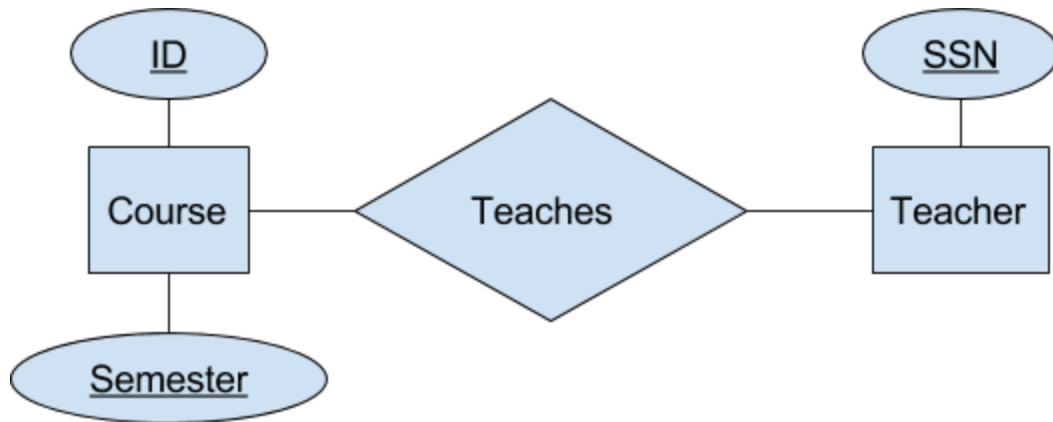


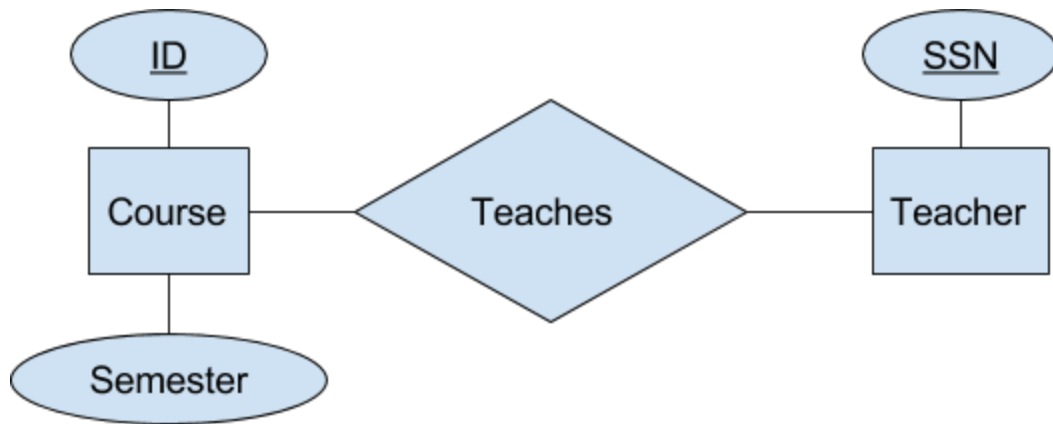
I pledge my honor that I abided by the Stevens Honor System.

**Exercise 1**

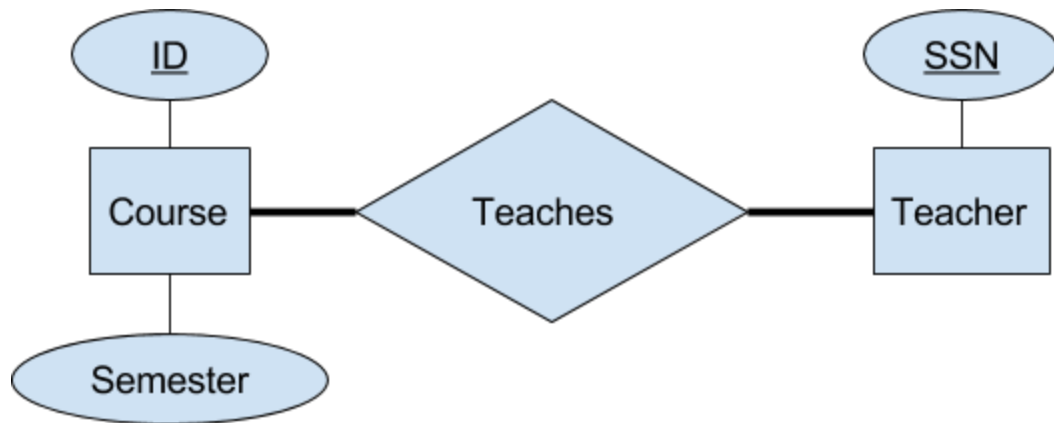
(a)



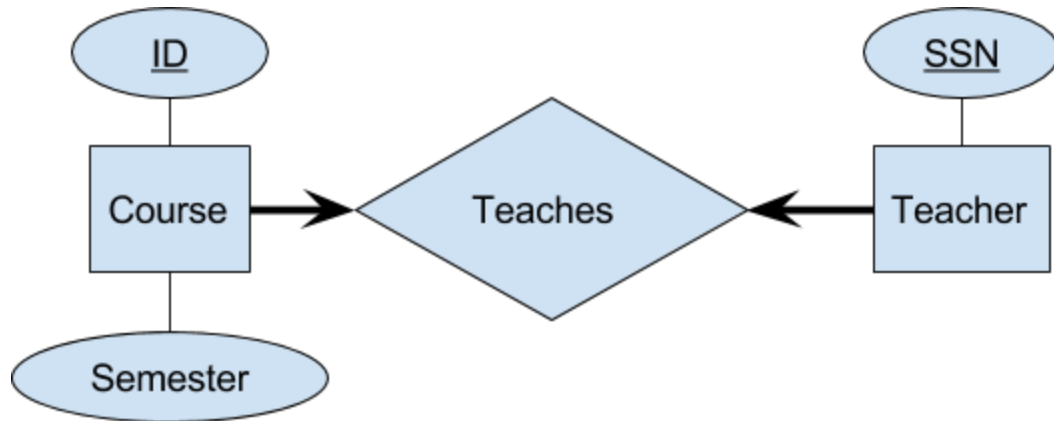
(b)



(c)

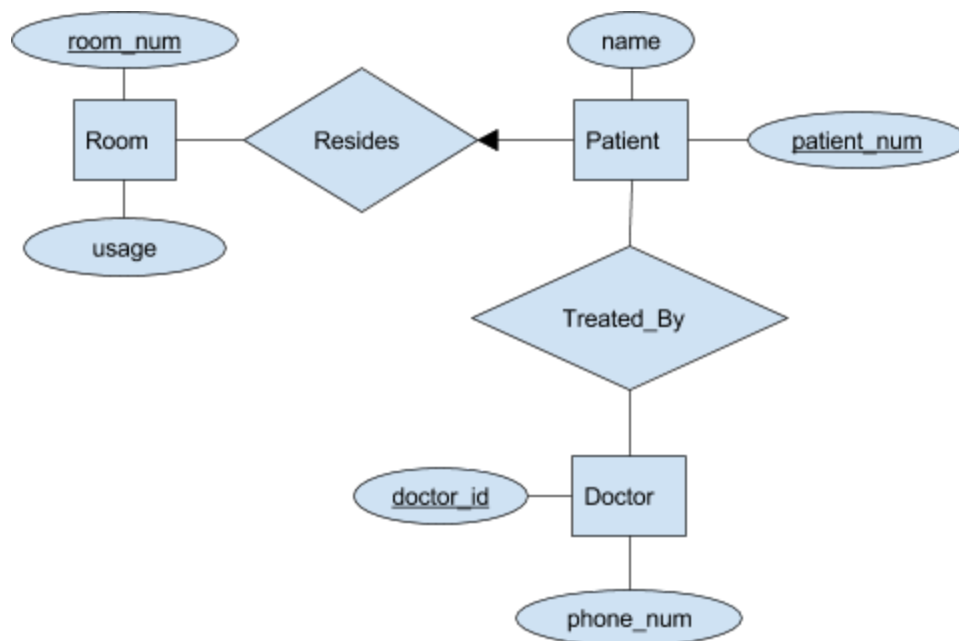


(d)



## Exercise 2

(a)



(b)

```
CREATE TABLE Resides (  
    patient_num INT,  
    room_num INT,  
    PRIMARY KEY (patient_num, room_num),  
    FOREIGN KEY (patient_num) REFERENCES Patient,  
    FOREIGN KEY (room_num) REFERENCES Room  
);
```

```
CREATE TABLE Treated_By (  
    patient_num INT,  
    doctor_id INT,  
    PRIMARY KEY (patient_num, doctor_id),  
    FOREIGN KEY (patient_num) REFERENCES Patient,  
    FOREIGN KEY (doctor_id) REFERENCES Doctor  
);
```