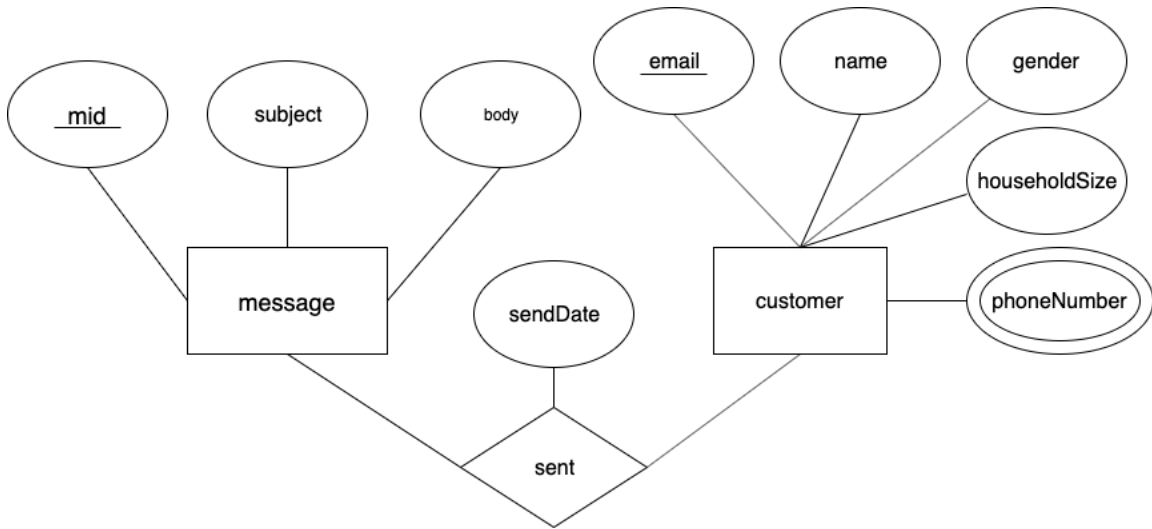Zhuo Liu(zl9901)

Question 1

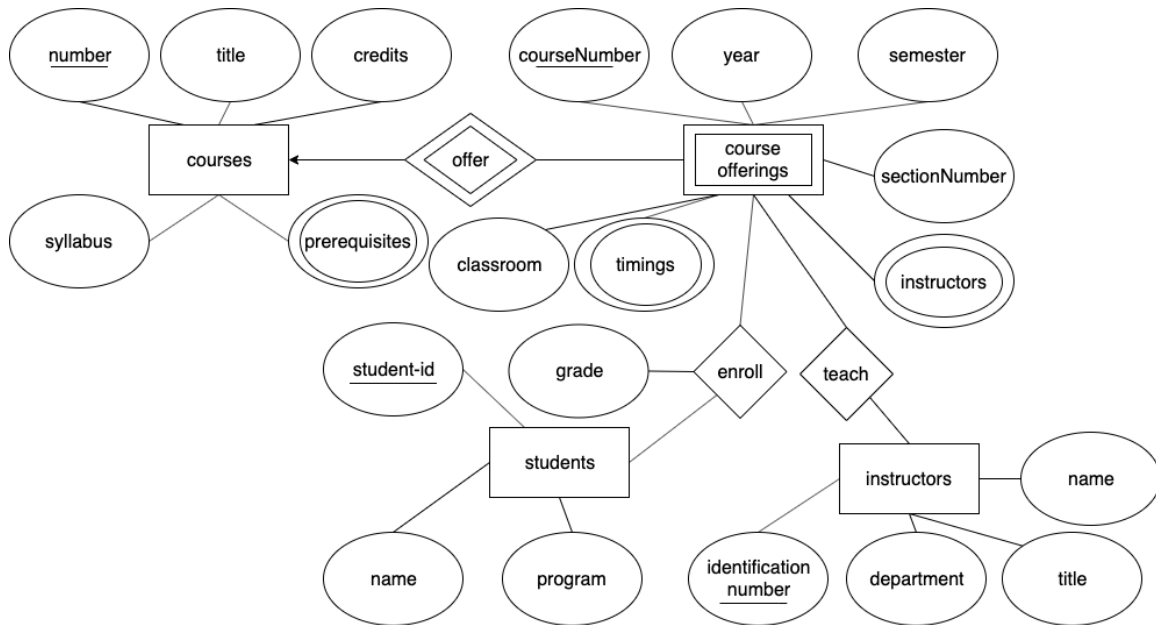
message(<u>mid</u>, subject, body**)   PK(**mid**)**
customer(<u>email</u>, name, gender, householdSize, phoneNumber**)   PK(**email**)**
sent(<u>mid, email</u>, sendDate**)   PK(**mid, email**)   FK1(**mid**)   FK2(**email**)**

Question 2

Assumption: One course has many prerequisites, one course offering has many timings and instructors.

courses(<u>number</u>**,** title, credits, syllabus, prerequisites**)   PK(**number**)**
course offerings(<u>courseNumber</u>, year, semester, sectionNumber, instructors, timings, classroom**)   PK(**courseNumber**)**
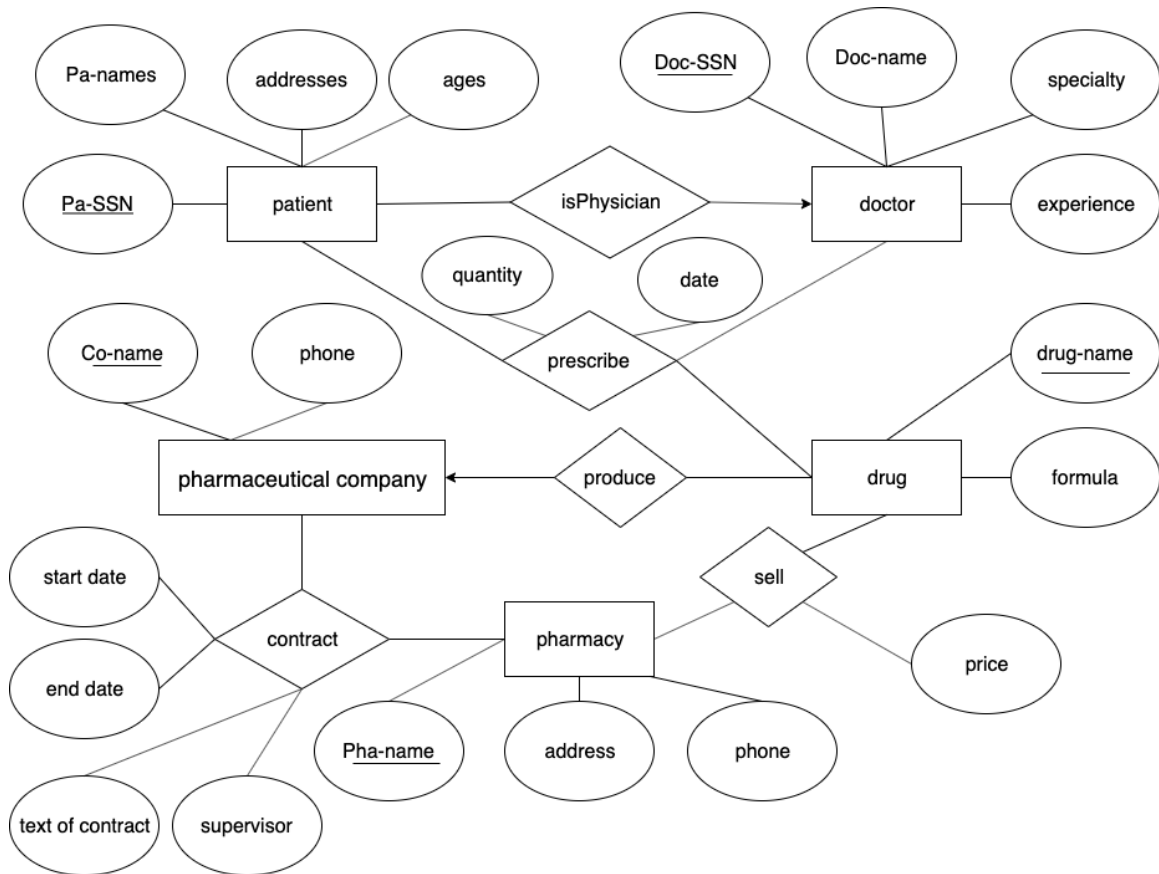**students(**<u>student-id</u>, name, program**)   PK(**student-id**)**
instructors(<u>identification number</u>, department, title, name**)   PK(**identification number**)**

enroll(<u>student-id, courseNumber</u>**,** grade**)   PK(**student-id, courseNumber**)   FK1(**student-id**)   FK2(**courseNumber**)**
teach(<u>courseNumber</u>**,** <u>identification number</u>**)   PK(**<u>courseNumber</u>**,** <u>identification number</u>**)   FK1(**courseNumber**)   FK2(**identification number**)**

Question 3

patient(<u>Pa-SSN</u>**,** Pa-names, addresses, ages**)   PK(**Pa-SSN**)**
doctor(<u>Doc-SSN</u>, Doc-names, specialty, experience**)   PK(**Doc-SSN**)**
pharmaceutical company(<u>Co-name</u>, phone**)   PK(**Co-name**)**
drug(<u>drug-name</u>, formula**)   PK(**drug-name**)**
pharmacy(<u>Pha-name</u>, address, phone**)   PK(**Pha-name**)**

isPhysician(<u>Pa-SSN</u>, <u>Doc-SSN</u>**)   PK(**Pa-SSN, Doc-SSN**)   FK1(**Pa-SSN**)   FK2(**Doc-SSN**)**
prescribe(<u>Pa-SSN</u>**,** <u>Doc-SSN</u>, <u>drug-name</u>, quantity, date**)   PK(**Pa-SSN**,** Doc-SSN, drug-name**)   FK1(**Pa-SSN**)   FK2(**Doc-SSN**)   FK3(**drug-name**)**
contract(<u>Co-name</u>**,** <u>Pha-name</u>, start date, end date, text of contract, supervisor**)   PK(**Co-name**,** Pha-name**)   FK1(**Co-name**)   FK2(**Pha-name**)**
sell(<u>Pha-name</u>**,** <u>drug-name</u>, price**)   PK(**Pha-name**,** drug-name**)   FK1(**Pha-name**)**

FK2(drug-name**)**