Objective: Create an ER diagram to model the data requirements for a university management system. The system should manage information about students, courses, instructors, and departments.

Requirements:

1. Entities and Attributes:
   * Students:
     + Attributes: Student\_ID (Primary Key), First\_Name, Last\_Name, Date\_of\_Birth, Gender, Email, Phone\_Number, Address, Enrollment\_Date.
   * Courses:
     + Attributes: Course\_ID (Primary Key), Course\_Name, Course\_Description, Credits, Department\_ID (Foreign Key).
   * Instructors:
     + Attributes: Instructor\_ID (Primary Key), First\_Name, Last\_Name, Email, Phone\_Number, Office\_Number, Department\_ID (Foreign Key).
   * Departments:
     + Attributes: Department\_ID (Primary Key), Department\_Name, Department\_Head (Instructor\_ID as Foreign Key).
2. Relationships:
   * Enrollment:
     + Students enrol in multiple courses.
     + Attributes: Enrollment\_ID (Primary Key), Student\_ID (Foreign Key), Course\_ID (Foreign Key), Enrollment\_Date, Grade.
   * Teaching:
     + Instructors teach multiple courses.
     + Attributes: Teaching\_ID (Primary Key), Instructor\_ID (Foreign Key), Course\_ID (Foreign Key), Semester, Year.
   * Department Management:
     + Each department is managed by one instructor (Department\_Head).
3. Constraints:
   * Each student can enrol in multiple courses, and each course can have multiple students.
   * Each instructor can teach multiple courses, but each course is taught by only one instructor per semester.
   * Each department can offer multiple courses, but each course belongs to only one department.
   * Each department is managed by one instructor, but an instructor can manage only one department.

Task: Using the above requirements, create an ER diagram that includes:

* All entities with their respective attributes.
* All relationships with their respective attributes.
* Primary and foreign keys clearly marked.
* Cardinality of relationships (one-to-one, one-to-many, many-to-many).