

## **BBT 3403: Database Systems**

### **CASE STUDIES**

#### **CASE STUDY 1: The Company Database**

Suppose that after the requirement collection and analysis phase, the database designers provide the following description of part of a company to be represented in a company database:

1. The company is organized into departments. Each department has a unique name, number and a particular employee who manages the department. We keep track of the start date when that employee began managing the department. A department may have several locations.
2. A department controls a number of projects; each of which has a unique name, a unique number and is located at a single location.
3. We store each employee's name, social security number (SSN), address, salary, sex, and birth date. An employee is assigned to one department but may work on several projects, which are not necessarily controlled by the same department. We keep track of the number of hours per week that an employee works on each project. We also keep track of the direct supervisor of each employee.
4. We want to keep track of the dependants of each employee for insurance purposes. We keep each dependent's first name, sex, birth date, and relationship to the employee.

#### **Required**

Draw an ER model for the company database.