1. SQL CREATE, ALTER, DROP, INSERT, UPDATE, DELETE, SELECT

2. Transforming ER diagrams to Relational Model
   
   Sub-topics:
   a. Transform entities
      - Specify primary key
      - Specify candidate (alternate keys)
      - Specify properties for each column
        1. data type
        2. null/not null
        3. default values
        4. other constraints
   b. Transform relationships (foreign keys used here)
      - 1:1 relationships, 1:N relationships
        - identifying relationships
        - non-identifying relationships
      - N:M relationships
      - Supertype/subtype relationships
   c. Specify logic to enforce minimum cardinalities

3. Normalization
   
   Sub-topics:
   a. Purpose
   b. Insert/delete/update anomalies
   c. Functional dependencies
      - Definition of key based on functional dependencies
   d. Normal forms
      - First normal form
      - Boyce-Codd Normal Form
      - Decomposition into relations that are in Boyce-Codd Normal Form

4. Triggers
   
   a. A trigger is a stored program that is attached to a table or view.
   b. Type of triggers
   c. Uses for triggers
   d. Writing a trigger
   e. Differences between triggers and stored procedures

5. Stored Procedures
a. A stored procedure is a program that performs some common action on
database data and is stored in the database.
b. Advantages of stored procedures
c. How to write a stored procedure

6. SQL VIEWS
   a. SQL View is a virtual table that is constructed from other tables or views.
   b. Syntax: CREATE VIEW viewname AS viewquery
   c. Order By clause cannot be used in the Create View query.
   d. A view can be queried as if it is a table.
   e. Uses for views
   f. Updating views

7. PHP - general
   a. variables, constants, arrays (numerically indexed arrays and associative
      arrays)
   b. control statements (if, for, foreach, while, …)
   c. files
   d. functions and variables scope
   e. objects/classes, inheritance

8. PHP - Work with MySQL
   - Connect to a database
   - Query
   - process results
   - close connection