Course number and name: 335CIS-3 Database Management system

Credits and contact hours: 3 crs.; 5hrs (2hrs theory, 2 hrs Lab and 1 hr. Tutorial)

Course Coordinator's name: Dr. Ahmad Tableb

#### Text book, Title, Author, and Year:

- John Adoloh Palinski, Oracle SQL and PL/SQL Handbook. Addison Wesley, Latest Edition
- Benjamin Rosenzwing, Elena Silvestrova, Oracle PL/SQL by Example, Printice Hall, Latest Edition

# a. Supplemental Materials:

- Ellen Gravina, Oracle Forms Developer: Build Internet Applications I, Rodney Hartzell, Latest Edition.
- Christian Bauwens Ursula Hov ,Oracle Reports Developer: Build Internet Reports, Latest Edition.
- Rajsheker Sunderraman, Oracle 9i prohramming, Addison Wesley, Latest Edition.
- www.oracle.com

## **Specific Course Information**

- **a.** Catalog Description: Programming in large-scale relational database environment using host language, design and implement applications. Topics covered in this course include: database programming using oracle environment or similar, procedural languages, stored procedures transaction management and introduction to oracle developer or extensible markup data definition and retrieval language to create and customize forms and reports, and integrate databases with other sources of data and applications
- **b.** Pre-requisites or Co-requisites: 230CIS-3
- c. Required, Elective, or Selected elective: Required

#### **Specific Goals for the Course**

- a. Specific Outcomes of the Instruction:
  - Identify the client/server architecture of the database
  - Use SQL as a procedural language to interact with DB.
  - Use control structure, composite data types, explicit cursors in PL/SQL to improve productivity on a DBMS.
  - Solve runtime errors
  - Predict runtime errors
  - Create procedures, functions, sequence, cursors and triggers.
  - Develop DB application to interact with DB.

### b. Students Outcomes Addressed by the Course: a, b, c, i, j

#### **Brief List of Topics to be Covered**

- PL/SQL Concepts
- General Programming Language Fundamentals
- SQL in PL/SQL

- Conditional Control: IF Statements
- Iterative Control
- Error Handling and Built-in Exceptions
- Introduction to Cursors
- Procedures
- Functions
- Triggers
- Introduction to Oracle Forms6i
- Introduction to Oracle Reports6i