



## Department of Computer Applications National Institute of Technology Tiruchirappalli

1. Course Outline			
<b>Course Title</b>	Database Management Systems Lab		
<b>Course Code</b>	CA702		
<b>Department</b>	Computer Applications	<b>No. of Credits</b>	2
<b>Pre-requisites Course Code</b>	CA712	<b>Faculty Name</b>	Dr.R.Eswari Mrs.A.Cynthia devi
<b>E-mail</b>	eswari@nitt.edu cynthia@nitt.edu	<b>Telephone No.</b>	0431-2503744
<b>Course Type</b>	Laboratory Course		

2. Course Overview
<p>This course concentrates on implementation of data definition and data manipulation commands and constraints. It allows students to practically implement views, nested queries, join queries, set operations using DML commands. The course also concentrates on PL/SQL programs to implement various types of control structure, procedures, functions and trigger for various events such as insertion, deletion and updation.</p>
3. Course Objectives
<ol style="list-style-type: none"> <li>1. Design and work in databases</li> <li>2. Perform normalization</li> <li>3. Apply DDL, DML commands</li> <li>3. Build complex queries</li> <li>4. Apply High-level programming language extensions (PL/SQL)</li> </ol>
4. Course Outcomes (CO)
<ol style="list-style-type: none"> <li>1. Design and work in databases, tables</li> <li>2. Perform normalization and other data base tasks</li> <li>3. Build complex queries for data retrieval at multilevel</li> </ol>

5. Course Outcome (CO)	Aligned Programme Outcome (PO)											
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
Design and work in databases, tables	M	H	H	M				L				
Perform normalization and other data base tasks	H	H	H				L	L				
Build complex queries for data retrieval at multilevel		H					L					

## 6. Course Content

Week	Topic
1.	Data definition language commands
2.	Data manipulation language commands
3.	In-built functions
4.	Nested queries and join queries
5.	Set operators
6.	Views
7.	PL/SQL - Control structure
8.	Procedure and function
9.	Trigger
10.	Database Design and Implementation using SQL and PL/SQL

7. Course Assessment Methods – Practical				
Sl. No.	Mode of Assessment	Week/Date	Duration	Weightage (%)
1.	Evaluation-1	4 <sup>th</sup> week	lab duration	20
2.	Evaluation-2	8 <sup>th</sup> week	lab duration	20
3.	Lab Record	10 <sup>th</sup> week		10
4.	Model Examination	11 <sup>th</sup> week	lab duration	25
5.	End Semester Lab	End of the course	lab duration	25

**8. Essential Readings (Textbooks, Reference books, Websites, Journals, etc.)**

**REFERENCES:**

- Ramon A Mata-Toledo and Pauline K Cushman, "Database Management Systems", Tata McGraw- Hill, 2011.
- Silberschatz, Korth and Sudarshan, "Data Base System Concepts", McGraw-Hill, 6th Edition, 2010.
- R. Elmasri, S.B. Navathe, "Fundamentals of Database Systems", 5<sup>th</sup> Edition, Pearson Education/Addison Wesley, 2007.
- P.Deshpande, "SQL & PL/SQL for oracle 11g", DreamTech press, 2011

**9. Course Exit Survey (mention the ways by which the feedback about the course is assessed and indicate the attainment level)**

- The students through the class representative may give their feedback at any time to the course faculty which will be duly addressed.
- The students may also give their feedback during Class Committee meeting.

**10. Course Policy (including plagiarism, academic honesty, attendance, etc.)**

- **Plagiarism**  
The students are expected to come out with their original code for problems given during the laboratory exercises, and tests/examinations.
- **Attendance**  
100% is a must. However, relaxation upto 25% will be given for leave on emergency requirements (medical, death, etc.) and representing institute events.

**11. Additional Course Information**

- The students can get their doubts clarified at any time with their faculty member with prior appointment.

**For Senate's Consideration**

1.   
2. 

Course Faculty



Class Committee Chairperson



HoD