1. COURSE

CS373. Data Visualization (Elective)

2. GENERAL INFORMATION

2.1 Credits	:	3	
2.2 Theory Hours	:	1 (Weekly)	
2.3 Practice Hours	:	2 (Weekly)	
2.4 Duration of the period	:	16 weeks	
2.5 Type of course	:	Elective	
2.6 Modality	:	Face to face	
2.7 Prerequisites	:	CS2702. Data Management II. (5th Sem)	

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

Information Management (IM) plays a leading role in almost every area where computers are used. This area includes the capture, digitization, representation, organization, transformation and presentation of information; Algorithms to improve the efficiency and effectiveness of access and update of stored information, data modeling and abstraction, and physical file storage techniques.

It also covers information security, privacy, integrity and protection in a shared environment. Students need to be able to develop conceptual and physical data models, determine which IM methods and techniques are appropriate for a given problem, and be able to select and implement an appropriate IM solution that reflects all applicable constraints, including scalability and Usability.

5. GOALS

- To make the student understand the different applications that the databases have, in the different areas of knowledge.

- Show appropriate ways of storing information based on their various approaches and their subsequent retrieval of information.

6. COMPETENCES

Nooutcomes

Nospecificoutcomes

7. TOPICS

Unit 1: Physical Database Design (10)	
Competences Expected: b,j	
Topics	**Learning Outcomes**
... ...	... [Usage] ... [Usage] ... [Usage]
Readings : [Bur04], [Cel05]	

8. WORKPLAN

8.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

8.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

8.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

9. PLANNING

DATE	TIME	SESSION TYPE	PROFESSOR
See at EDU	See at EDU	See at EDU	See at EDU

10. EVALUATION SYSTEM

********* EVALUATION MISSING ********

11. BASIC BIBLIOGRAPHY

[Bur04]   Donald K. Burleson. *Physical Database Design Using Oracle*. CRC Press, 2004.

[Cel05]   Joe Celko. *Joe Celko's SQL Programming Style*. Elsevier, 2005.