National Institute of Technology Tiruchirappalli
Department of Computer Applications

Course Outline

Name of the Programme	M.Sc Computer Science
Course Title	DBMS and Data mining lab

Course Code	CAS754	**No. of Credits**	2

Pre-requisites Course Code	CAS767,CAS764
Session	Jan 2020

Name of the faculty	S.Sangeetha	**Department**	Computer Applications
Officia E-mail	sangeetha@nitt.edu	**Telephone**	0431-2503743

Name of Course Coordinator(s)	Dr.Michae Arock

Officia E-mail	michael@nitt.edu	**Telephone No.**	0431-2503736

Course Type	Laboratory Course

Syllabus:
- Exercises to construct and query databses
- Exercises to implement data mining Algorithms

Course Overview

The DBMS and Data mining lab helps the students to learn the creation and manipulation of database. It helps the students to access data by writing appropriate queries. It also helps the students to mine the data to find useful information using data mining tools.

Course Objectives

- To learn and work with ETL tools
- To learn and work with Data mining algorithms
- To apply mining techniques on realistic data

Course Outcome (CO)	Aligned Programme Outcome (PO)
Work with ETL tools.	1,3,5
Demostrate classification and clustering in large dataset.	2,3,4,5
Ability to add minig algorithms to the tools	1,5
Ability to apply mining techniques for realistic data	3,4,5

COURSE TEACHING AND LEARNING ACTIVITIES

Week	Topics covered
1	Data Defintion and Manipulation
2	Querying the database- Simple queries
3	Querying the database- Complex queries
4	Extract Transform Load data
5	Data Preprocessing
6	Implementation of Data Associations algorithm
7	Finding Data Associations in a dataset
8	Implementation of Data Classification algorithm
9	Data Classification on dataset
10	Implementation of Data Clustreing algorithm
11	Finding Clusters in a dataset
12	Project / Assignment evaluation

Course Assesment

Sl. No.	Mode of Assessment	Week/Date	Weightage (%)
1.	Code Evaluation-1	3rd week	20
2.	Code Evaluation-2	6th week	20
3.	Project / Assignment	12th week	30
4.	End Semester Lab	At the end of course	30
		Total	100

Essential Readings

1. https://www.bonobo-project.org/
2. https://scikit-learn.org/stable/

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.

Course Policy

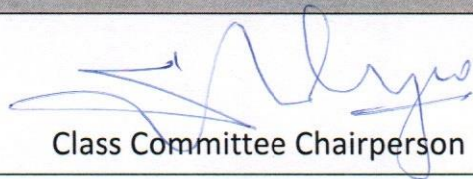**ATTENDANCE POLICY** (A uniform attendance policy as specified below shall be followed)

- ➢ At least 75% attendance in each course is mandatory.
- ➢ A maximum of 10% shall be allowed under On Duty (OD) category.
- ➢ Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.

ACADEMIC DISHONESTY & PLAGIARISM

- ➢ Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- ➢ Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- ➢ The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- ➢ The above policy against academic dishonesty shall be applicable for all the programmes.
- ➢ The students are expected to come out with their original solution for problems given as assignment, and tests/examinations.

For Approval

| Course Faculty | Class Committee Chairperson | HoD |