

Course Outline

1. Document Information

Degree Program	Computer Science
Course Number	CS 532
Course Title	Topics in Information Systems
Semester Hours	3
Course Coordinator	Koushik Sinha
Revision Term	Fall 2020
Latest Revision	Spring 2021

2. Catalog Description

A detailed study of two or three topics relevant to information systems. Topics may include but are not limited to sorting, searching, information retrieval and automatic text processing, database security and encryption, distributed databases, and data communication.

3. Textbooks

4. References

5. Course Learning Outcomes

- To provide the student with an in-depth knowledge of two or more important topics from the area of information systems. Possible topics include object-oriented systems, distributed database, knowledge-base systems, encryption, data compression, hashing, indexed files, and storage architectures

6. Assessment of the Contribution to Student Outcomes

Outcome	1	2	3	4	5	6	7
Assessed	X	X			X		X

7. Prerequisites by Topic

CS 430. Special approval needed from the instructor.

8. Major Topics Covered in the Course

1. Distributed databases
2. Object-oriented systems
3. Information retrieval and automatic text processing
4. Knowledge-base systems
5. Encryption
6. Query optimization.
7. Hashing
8. Indexed files
9. Internal sorting
10. External sorting
11. Searching
12. Data compression and coding
13. Secondary memory architecture