**CSC430/530: DATABASE MANAGEMENT SYSTEMS (syllabus)**

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| **DESCRIPTION**: | The course aims at introducing the student to the theory, design, and implementation of Relational Data Base Management Systems (RDBMS). |
|  | Topics include database concepts, models and applications; database management systems; implementation of a practical database. |
| **OBJECTIVE**: | Expose students to database concepts of effective storage, security, and allied applications of legacy storage. The course emphasizes on the practical steps towards the creation of effective database management systems and the implementation of a simple database. The in-class experience for students is tailored specifically to supervised practical lab sessions and exercises. |
| **PREREQUISIT**: | CSC 220: Data Structures. |
| **TEXTBOOK**: | *Fundamentals of Database Systems (7th edition),* by Elmasri and Navathe*.* |
| **GRADES**: | The final grade shall consist of the average of exams, assignments, labs, and literature review (graduate students only) as listed below: |
|  | **Undergrad/Grad**  **Assignments** 60 \* 5 = 300  **Labs** 30 \* 4 = 120  **Exams** 100 \* 2 = 200  **Paper** 60 (Grad only) |

**TOPICS COVERED (tentative):**

* Database System Concepts & Architecture
* Data Modeling Using Entity–Relationship (ER) Model
* Enhanced Entity–Relationship (EER) Model
* Relational Data Model & Relational Database Constraints
* Relational Algebra
* Structured Query Language (SQL)
* Functional Dependencies & Normalization
* Indexing Structures & Physical Database Design

Students needing testing or classroom accommodations based on a disability are encouraged to discuss those needs with me as soon as possible. For more information, please visit [www.latech.edu/ods](http://www.latech.edu/ods).

If you are ill, you can get treatment at the Wellness Center in the Lambright Intramural Center building. The nurses there can treat minor illnesses and can give vouchers to see doctors in town for more serious illnesses. Since you have already paid for this service through your fees, there is usually no additional charge. Also, if you sign a HIPPA release form at the time of your visit, they can verify that you were ill and thus you will have an excused absence for missing class.

In accordance with the Academic Honor Code, students pledge the following: “Being a student of higher standards, I pledge to embody the principles of academic integrity.” For the Academic Honor Code, please visit <http://www.latech.edu/documents/honor-code.pdf>.

All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you’re able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit [http://ert.latech.edu](http://ert.latech.edu/).