Database Systems
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Knowledge Areas that contain competencies (knowledge, skills, and dispositions) covered in the course

Knowledge Area	Total Number of Contact Hours
Storage systems fundamentals	48

Where does the course fit in your undergraduate Data Science curriculum?
This course is the core course of computer, software engineering and other majors, and it is also a required information technology course for non-computer majors. Most of the students who take this course are in the upper grades, among which males are relatively high.

What is covered in the course?
This series of courses aims to enable students to fully grasp the basic concepts and principles of database systems, proficiently master database system languages, database abstraction and modeling methods, and database application design methods, and cultivate students' abstraction and design in information management and information systems , Development, application and management capabilities. At the same time, data storage, database query implementation, query optimization, transaction processing and other technologies are also the ability to manipulate databases that computing students must master in the professional field. This course will also teach you in detail.
This course will be divided into four parts for introduction: 1. Basic knowledge and relational model; 2. Database language and its application; 3. Data modeling and database design; 4. Database management system implementation technology.

What is the format of the course?
It is face to face with about 48 contact hours. This is a course that combines theory and application. Classwork provides much of the content and expectations of the course. Curriculum related experiments are designed to allow students to better experience the practical application of the theories they have learned.

How are students assessed?
This course is divided into four parts: mooc, face-to-face instruction, classwork, and experiment. Corresponding unit tests are arranged in mooc. Each unit test can be answered twice, and the highest one is taken into the total score. The experiment is carried out in a single group, and detailed instructions will be given in the experiment manual. Encourage students to use search engines and give tips and techniques. Total score (100 points) = mooc (20%) + classwork (20%) + experiment (20%) + final exam (40%).

Course tools and materials
This course does not require any materials, the teacher will send the materials to everyone when teaching.

Why do you teach the course this way?

This course is mainly in the form of classroom face-to-face, interspersed with small class discussions, flip classes, and experiments. Classroom face-to-face teaching is mainly taught by teachers, as the most common form of teaching, can be more comprehensive and systematic transfer of the main knowledge points to everyone. Doing experiments can enhance the practical ability to operate, put the knowledge learned into use, not only on paper, general talk, the understanding of knowledge points more in place, more thorough.

Body of Knowledge coverage

KA	Sub-domain	Competencies Covered	Hours
CCF	Storage systems fundamentals	1. Basic knowledge and relationship model; 2. Database language and its application; 3. Data modeling and database design; 4. Database management system implementation technology	48