



E-Commerce and Databases

**CSCI 101
Dannelly's Sections**



Definition of E-Commerce:

- commerce that is transacted electronically, usually over the Internet

Uniqueness of E-Commerce

- Internet is ubiquitous
- Internet works the same everywhere
- Low market entry costs
- Unique Marketing Abilities
 - Targeted messages to Individuals
 - Click-stream Tracking



Internet Business Models

- Virtual Storefront
- Information Broker
- Transaction Broker
- Online Marketplace
- Social Network
- Service Provider



Database Definitions

- **Database**
- **Tables**
- **Records**
- **Fields**
- **Key Field**

Fall 2010 Enrollment			
Student ID	Class	Credit	Grade
12345	CSCI101.001	1.5	
12345	HIST101.009	3	
12345	ACAD101.004	1	
99146	BIOL151.003	4	
99146	MATH201.001	4	

Student Information					
Student ID	Last Name	First Name	Address	City	Zip
12345	Smith	John	123 Main St	Rock Hill, SC	29732
99146	Jones	Sally	2903 Broadway	NY, NY	10036

Class Information					
Class	Instructor	Location	Time	Enrolled	Max
CSCI101.001	Dannelly	Thurmond 210	M 11:00-12:15	38	42

Database Queries

- How many credits did student 12345 take in Fall2010?

```
sum "Credit"
from "Fall 2010 Enrollment"
where "Student" equals "12345"
```

- What classes is Dannelly teaching?

```
select "Class"
from "Class Information"
where "Instructor" equals
"Dannelly"
```