

## **LIS 674 Database Design & Creation - Nathan Dwyer**

Primary Student Learning Outcome: SLO4 Technologies (Not core-eligible)

**Last ran:** Fall 2018

**Meeting days:** Mondays, 5:00-7:30pm; HL 003G

### **Course objectives:**

- Have a basic understanding of information requirements gathering
- Present and defend a requirements-driven database specification
- Understand and balance trade-offs in database design choices
- Represent database specification in Entity-Relationship notation
- Communicate database technical designs and requirements
- Implement a simple relational database

### **Required texts:**

- No textbook. Required readings will be made available on class Google Drive.

### **Required technology:**

- Computer with a reliable internet-connection or mobile device with a high-speed connection, with at least one up-to-date modern browser, and office productivity software
- Regular access to a laptop for class (with software for SQL, see syllabus)

### **Teaching methods:**

- Practical, hands-on introduction to real world approaches and techniques of database design
- Highly participatory class discussion

### **Research methods:**

- N/A

### **Major assignments:**

- Requirements gathering and database proposal presentation [Group project]
- Entity-relationship model [Group project]
- Create the SQL to define and query a small database + presentation [Group project]
- Short papers (3)

**ePortfolio-eligible assignment:** Creation of SQL to define and query a small database [Group project]