1. Course Number and Name:

INFS 3770 Introduction to Database Systems

- 2. Credits and Contact hours: Credits: 3 hours, Contact: 3 lecture hours
- **3. Instructor's or course coordinator's name:** Teresa Keefe
- 4. Text book, title, author, and year: None
  - a. Other supplemental materials:

# 5. Specific Course Information:

# a. Brief description of the content of the course (catalog description):

The main topics to be covered in this course include data modeling and logical database design; database architectures with an emphasis on the relational data model; physical database design; data and database administration, and data manipulation (particularly SQL-based data creation, retrieval, update, and deletion). Microsoft Access and Oracle SQL Developer will

be used to introduce these database topics.

# b. Pre-requisites, or co-requisites:

BUAD 2020/3050 and INFS 3150

# 6. Specific goals for the course:

# a. Specific outcomes of instruction:

1. Understand database design – both conceptual and logical.

- 2. Develop entity relationship diagrams.
- 3. Convert entity relationship diagrams into normalized relational databases.
- 4. Formulate queries in QBE & SQL

5. Demonstrate competent use of RDBM software tools to create, manage and query a database.

6. Demonstrate competency in writing triggers and stored procedures.

b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course:

None

## 7. Brief list of topics to be covered:

- 1. Introduction to Database Management
- 2. Relational Databases
- 3. Designing the Database
- 4. Entity Relationship Modeling
- 5. Normalization
- 6. Intro to DML, SQL & Relational Algebra
- 7. Intro to Oracle Developer P/L
- 8. Aggregation & Grouping