

# Course Addendum

Semester**: Winter 2022** Subject Code: **DBS211** Section**: ZAA**

Subject Title: **Introduction to Database Systems**

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Office Hours**: By appointment online**

Approved by:

*Kathy Dumanski, Chair, School of Software Design and Data Science*

Please read this addendum to the general course outline carefully. It is your guide to the course requirements and activities.

Please refer to the course outline for learning outcomes, course description and text and materials.

Please also visit [ict.senecacollege.ca](https://seneca-my.sharepoint.com/personal/laura_ojanen_senecacollege_ca/Documents/Course%20Materials/ict.senecacollege.ca) for key information on courses, graduation requirements, transfer credit, and more from the School of Software Design and Data Science.

**Assessment Summary**

* Labs (weekly, 9@4% each) 36%
* Project (2 milestone) 24% (milestone 1 - 4%, milestone 2 - 10%, final 10%)
* Mid-term Test - 20%
* Final Test - 20%

## Course Policies

* Achieve a grade of 50% or better on the weighted average of the tests
* Successful participation and submission of the group project
* Grading Policy: <http://www.senecacollege.ca/about/policies/grading-policy.html>)

**Academic Policies:**

<http://www.senecacollege.ca/about/policies/academics-and-student-services.html>

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**TENTATIVE WEEKLY SCHEDULE**

**Semester Winter 2022**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Topic or Skill** | **Reading** | **Assessment** | **Weight** |
| **Week 1**  **Jan 10-14** | **Introduction to Databases and Data** | **Relationships, Keys and Referential Integrity** | **Lab 1**  **Getting setup and started** | **4%** |
| **Week 2**  **Jan 17-21** | **Database Relational Model** | **SQL standards**  **and Basic Statements** | **Lab 2 Relationships** | **4%** |
| **Week 3**  **Jan 24-28** | **Data Modelling**  **ERDs** | **Repeating Groups**  **Time Sensitive Variables**  **Multi-Value Dependencies** | **Lab 3**  **ERD** | **4%** |
| **Week 4**  **Jan 31 – Feb 4** | **Normalization 1**  **UNF and 1NF** | **Partial and Transitive Dependencies** | **Lab 4**  **Normalization UNF and 1NF** | **4%** |
| **Week 5**  **Feb 7-11** | **Normalization 2 2NF and 3NF** | **Review Normalization**  **Reflection Research** | **Lab 5**  **Normalization 2NF and 3NF** | **4%** |
| **Week 6**  **Feb 14-18** | **Normalization in ERDs**  **Full Case Study** | **Normalization and Data Modelling** | **Potential bonus lab** |  |
| **Week 7**  **Feb 21-25** | **Review** |  | **Midterm Test** | **20%** |
| **STUDY WEEK Feb 28-Mar 4** | | | | |
| **Week 8**  **Mar 7-11** | **Intro to single table SQL (DML)**  **Select, from, where, order by, alias wildcard**  **CRUD insert update delete** | **Tupples**  **and**  **ANSI92-Joins** | **Lab 6**  **DML 1 - CRUD** | **4%** |
| **Week 9**  **Mar 14-18** | **Multi-table SQL (DML)**  **Joins and Views**  **Inner, outer, sets** | **Basic DDL Statements**  **and**  **Constraints** | **Project Milestone 1** | **4%**  **4%** |
| **Week 10**  **Mar 21-25** | **Single Line Functions** | **Date data types, parameters** | **LAB 7**  **DML 2 - Joins** | **4%** |
| **Week 11**  **Mar 28-Apr 1** | **SQL (DDL)**  **Data types, constraints**  **CREATE, ALTER** | **CREATE, or replace**  **ALTER, DROP**  **PK, FK, CK, UK, NN** | **Lab 8**  **DDL**  **Project Milestone 2** | **10%** |
| **Week 12**  **Apr 4-8** | **Security and Transactions**  **And catchup if needed** | **GRANT and REVOKE**  **Transaction, COMMIT, SAVEPOINT, and ROLBACK** | **Lab 9**  **Transactions** | **4%** |
| **Week 13**  **Apr 11-15** | **FINAL TEST** |  | **Final Test** | **20%** |
| **Week 14**  **Apr 18-22** | **Review**  **And**  **Wrapup** |  | **Group Project**  **due** | **10%** |

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