

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. CSCI

COURSE NUMBER: 2105

NUMBER OF CREDITS: 3

Lecture: 3 Lab: 0 OJT 0

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| Course Title: |
| Advanced Database Concepts with SQL |

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| Catalog Description: |
| Advanced Database Concepts with SQL introduces a comprehensive look at SQL (Structured Query Language) which is a programming language that is used by diverse groups of programmers today. Learning of SQL commands and database design and the many uses of SQL. |

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| Prerequisites or Necessary Entry Skills/Knowledge: |
| CSCI 1102, ACCT 1122 |

FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

- ☐ Goal 1: Communication: By meeting the following competencies:
- ☐ Goal 2: Critical Thinking: By meeting the following competencies:
- ☐ Goal 3: Natural Sciences: By meeting the following competencies:
- ☐ Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- ☐ Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- ☐ Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- ☐ Goal 7: Human Diversity: By meeting the following competencies:
- ☐ Goal 8: Global Perspective: By meeting the following competencies:
- ☐ Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- ☐ Goal 10: People and the Environment: By meeting the following competencies:

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| Topics to be Covered |
| Advanced database designing |
| Creating multiple table queries |
| Updating and creating new tables from existing tables |
| Database administration |
| SQL functions and procedures |
| Oracle databases |
| Functions and procedures |

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| Student Learning Outcome |
| Create database administration features of SQL which include: use of views, granting and revoking user privileges, creating, dropping and using an index |
| Execute the use of the SQL commit, rollback, update, insert, delete commands to update table data. |
| Create, maintain and update advanced features of the Oracle software application. |
| Create multi-table forms and cross-tab queries. |
| Develop and utilize relational databases. |

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| Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| *If yes, please list the competencies below |

Revised Date: 1/18/2022