FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE ID: CAP 2787C

COURSE TITLE: Data Warehousing

PREREQUISITE(S): CTS 2437C

COREQUISITE(S): None

CONDITIONS: None

CREDIT HOURS: 3

CONTACT HOURS/WEEK: 4

CONTACT HOUR BREAKDOWN:

Lecture/Discussion: 3

Laboratory: 1

Other:

FACULTY WORKLOAD POINTS: 3.7

STANDARDIZED CLASS SIZE

ALLOCATION: 24

CATALOG COURSE DESCRIPTION:

The purpose of this course is to provide an introduction to Data Warehousing. This course will provide instruction on how to build a data warehouse. A data warehouse is the foundation for business intelligence. Students will build a data warehouse utilizing state of the art technologies and general accepted practices. In addition, this course will provide instruction as to how to utilize the data in a data warehouse. Students will learn to use general information and knowledge that will lead to informed decisions for businesses. This will include reports, dashboards and various methods for visualizing data.

SUGGESTED TEXT(S): *The Data Warehouse Toolkit: The Definitive Guide to   
 Dimensional Modeling,* latest edition.

IMPLEMENTATION DATE: Fall Term 2018 (2188) – Proposal 2018-32

REVIEW OR MODIFICATION DATE:

COURSE TOPICS CONTACT HOURS

PER TOPIC

I. Databases in data warehousing 7

II. OLTP design techniques review 7

III. Business intelligence architecture and components 7

IV. SSAS and Cube development/deployment 7

V. SSIS project development 7

VI. Data quality 7

VII. Knowledge base 6

VIII. Data reports 6

IX. Dashboard development 6

Program Title: Computer Information Technology

COURSE TITLE: Data Warehousing

CIP Number: 1511010307

Program Frameworks can be found at the following website: <http://www.fldoe.org/workforce/dwdframe/>

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| **Florida State College at Jacksonville** | **Course Learning Outcomes and Assessment** |

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| **SECTION 1** | | | | | | | | | | | | | | | | | | | | | | | |
| Course Prefix and Number: | | | | | CAP 2787C | | | | | | | | | | Semester Credit Hours (Credit): | | | | | | | | 3 |
| Contact Hours (Workforce): | | | | | | | |  |
| Course Title: | | | | | Data Warehousing | | | | | | | | | | | | | | | | | | |
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| **SECTION 2a *(To be completed for General Education courses only.)*** | | | | | | | | | | | | | | | | | | | | | | | |
| ***TYPE OF COURSE (Place an “X” in the box next to those that are applicable.)*** | | | | | | | | | | | | | | | | | | | | | | | |
|  | General Education Core (If selected, core discipline area will be identified in Section 4.) | | | | | | | | | | | | | | | | | | | | | | |
|  | General Education (If selected, you must also complete Section 4, Section 5, and Section 8) | | | | | | | | | | | | | | | | | | | | | | |
| **SECTION 2b** | | | | | | | | | | | | | | | | | | | | | | | |
| ***TYPE OF COURSE (Place an “X” in the box next to those that are applicable.)*** | | | | | | | | | | | | | | | | | | | | | | | |
|  | A.A. Elective | | | | | | |  | | A.S. Required Course | | | | | | | | | X | A.S. Professional Elective | | | |
|  | A.A.S. Required Course | | | | | | |  | | A.A.S. Professional Elective | | | | | | | | |  | Technical Certificate | | | |
|  | PSAV/Clock Hour/Workforce | | | | | | |  | | Development Education | | | | | | | | |  | Apprenticeship | | | |
|  | Upper Division/Bachelors | | | | | | |  | | Other: | | If selected, use this space to title “other” option. | | | | | | | | | | | |
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| **SECTION 3** | | | | | | | | | | | | | | | | | | | | | | | |
| ***INTELLECTUAL COMPETENCIES (Place an “X” in the box next to those that are applicable.)*** | | | | | | | | | | | | | | | | | | | | | | | |
|  | | Reading |  | Speaking | | | X | | Critical Analysis | | | | |  | | | Qualitative Skills | | | |  | Scientific Method of Inquiry | |
|  | | Writing |  | Listening | | | X | | Information Literacy | | | | |  | | | Ethical Judgement | | | |  | Working Collaboratively | |
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| **SECTION 4 *(To be completed for General Education courses only.)*** | | | | | | | | | | | | | | | | | | | | | | | |
| ***GENERAL EDUCATION DISCIPLINE AREA (Place an “X” in the box next to those that are applicable.)*** | | | | | | | | | | | | | | | | | | | | | | | |
|  | Communications | | | | |  | | | | Humanities | | |  | | | Mathematics | | | | | | | |
|  | Social and Behavioral Sciences | | | | | | | | | | | |  | | | Natural Sciences | | | | | | | |
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| **SECTION 5 *(To be completed for General Education courses only.)*** | | | | | | | | | | | | | | | | | | | | | | | |
| ***GENERAL EDUCATION LEARNING OUTCOME AREA (Place an “X” in the box next to those that are applicable.)*** | | | | | | | | | | | | | | | | | | | | | | | |
|  | Communication | | | | |  | | | | Critical Thinking | | |  | | | Information Literacy | | | | | | | |
|  | Scientific and Quantitative Reasoning | | | | | | | | | | | |  | | | Global Sociocultural Responsibility | | | | | | | |
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| **SECTION 6** | | | | | | | | | | | | | | | | | | | | | | | |
| ***LEARNING OUTCOMES*** | | | | | | | | | | | ***TYPE OF OUTCOME***  ***(General Education, Course or Program)*** | | | | | | | ***METHOD OF ASSESSMENT*** | | | | | |
| Demonstrate proficiency in the concepts behind OL TP (Online Transaction Processing) design concepts and principals. | | | | | | | | | | | Course | | | | | | | Quiz, test or assignment | | | | | |
| Demonstrate proficiency in the concepts behind OLAP (Online Analytical Processing) design concepts and principals. | | | | | | | | | | | Course | | | | | | | Quiz, test or assignment | | | | | |
| Design an OLAP database using dimensional modeling techniques | | | | | | | | | | | Course | | | | | | | Class assignment, project or team project | | | | | |
| Create a data warehouse based on OLAP design | | | | | | | | | | | Course | | | | | | | Lab assignment or project | | | | | |

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| **SECTION 6 (Continued)** | | |
| ***LEARNING OUTCOMES*** | ***TYPE OF OUTCOME***  ***(General Education, Course or Program)*** | ***METHOD OF ASSESSMENT*** |
| Create an ETL (Extract/Transfer/Load process to populate and update the data warehouse from OL TP database utilizing SQL Server Integration (SSIS). | Course | Lab assignment or project |
| Develop data cubes utilizing SQL Server Reporting Services (SSRS). | Course | Lab assignment or project |
| Develop dashboards utilizing Microsoft Performance Point. | Course | Lab assignment or project |

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| **SECTION 7** | | | |
| Faculty name(s): | Steve Mannion | Date: | 10/8/2017 |

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