SYLLABUS

DATE OF LAST REVIEW: 02/2013
CIP CODE: 15.1201
SEMESTER: Departmental Syllabus
COURSE TITLE: Data Marts and Query Tools
COURSE NUMBER: CIST-0208
CREDIT HOURS: 3
INSTRUCTOR: Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS: Departmental Syllabus
TELEPHONE: Departmental Syllabus
EMAIL: Departmental Syllabus

KCKCC-issued email accounts are the official means for Electronically communicating with our students.

PREREQUISITE(S): CIST-0154 (Principles of Data Warehousing)

REQUIRED TEXT(S):
Please check with the KCKCC bookstore, http://www.kckccbookstore.com/, for the required texts for your particular class.

COURSE DESCRIPTION:
This overview course will provide the student with knowledge of data marts. Discussion will further include reporting tools such as Crystal Reports (Seagate) and analysis tools such as DSS Agent or SAS.

METHOD OF INSTRUCTION:
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.
COURSE OUTLINE:
Course content may vary, but will generally include the following:

I. Data Marts by other names
   A. Reporting databases
   B. Departmental DSS databases
   C. OLAP databases
   D. Multidimensional databases
   E. Lightly summarized databases
   F. Data Mart Community
   G. Data Mart Appeal
   H. Data Mart Source

II. Building the Data Mart
   A. Loading
   B. Metadata in the Data Mart
   C. Data Modeling
   D. Purging the Data Mart
   E. Contents

III. Structure within the Data Mart
   A. Reference Tables
   B. Performance

IV. The Data Mart Environment
   A. Accessing data
   B. Response time
   C. Data Mart growth
   D. Access and analysis tools
   E. System Management
   F. Metadata management

EXPECTED LEARNER OUTCOMES:
A. Upon completion of the course the student will be able to demonstrate knowledge of the Data Mart community and the many other names used to make reference to a Data Mart.
B. Upon completion of the course the student will be able to demonstrate knowledge of the manner in which a Data Mart is constructed.
C. Upon completion of the course the student will be able to demonstrate knowledge of the structure of a Data Mart.
D. Upon completion of the course the student will be able to demonstrate knowledge of the Data Mart Environment and of the access and analysis tools which are used to make them function.

COURSE COMPETENCIES:
Upon completion of the course the student will be able to demonstrate knowledge of the Data Mart Community and the many other names used to make reference to a Data Mart.
1. Upon completion of the course the student will be able to define terminology associated with a Data Mart.
2. Upon completion of the course the student will be able to define OLAP.
3. Upon completion of the course the student will be able to define Multidimensional databases.
4. Upon completion of the course the student will be able to define lightly summarized databases.
5. Upon completion of the course the student will be able to identify the individual elements of a Data Mart.
6. Upon completion of the course the student will be able to differentiate between data in a Data Mart and data in a data warehouse.
7. Upon completion of the course the student will be able to identify Data Mart community users. (Farmers or Explorers)
8. Upon completion of the course the student will be able to identify considerations associated with the information found in a Data Mart.

**Upon completion of the course the student will be able to demonstrate knowledge of the manner in which a Data Mart is constructed.**

9. Upon completion of the course the student will be able to define loading as it relates to a Data Mart.
10. Upon completion of the course the student will be able to define metadata as it relates to a Data Mart.
11. Upon completion of the course the student will be able to define data modeling as it relates to a Data Mart.
12. Upon completion of the course the student will be able to define purging as it relates to a Data Mart.
13. Upon completion of the course the student will be able to identify the process by which a Data Mart is loaded.
14. Upon completion of the course the student will be able to analyze data and identify Data Mart metadata.
15. Upon completion of the course the student will be able to interpret data and determine if a data model is required in order to construct a data mart.
16. Upon completion of the course the student will be able to define purging as it relates to a Data Mart.
17. Upon completion of the course the student will be able to interpret data and purge a Data Mart.
18. Upon completion of the course the student will be able to differentiate between prepared data and ad hoc data in a Data Mart.

**Upon completion of the course the student will be able to demonstrate knowledge of the structure of a Data Mart.**

19. Upon completion of the course the student will be able to identify the manner in which a Data Mart is constructed.
20. Upon completion of the course the student will be able to define the term farmer-oriented tables as it relates to a Data Mart.
21. Upon completion of the course the student will be able to define star joins as it relates to a Data Mart.
22. Upon completion of the course the student will be able to define reference table as it relates to a Data Mart.
23. Upon completion of the course the student will be able to interpret data and construct a reference table in a Data Mart.
24. Upon completion of the course the student will be able to identify at least five different methods by which performance may be enhanced in a Data Mart.

*Upon completion of the course the student will be able to demonstrate knowledge of the Data Mart Environment and of the access and analysis tools which are used to make them function.*

25. Upon completion of the course the student will be able to identify methods by which data may be accessed in a Data Mart.

26. Upon completion of the course the student will be able to interpret data and evaluate response time in a Data Mart.

27. Upon completion of the course the student will be able to identify methods by which a Data Mart may be managed.

28. Upon completion of the course the student will be able to identify methods by which metadata may be managed.

29. Upon completion of the course the student will be able to interpret data and determine what data is being accessed in a Data Mart.

30. Upon completion of the course the student will be able to interpret data and determine the most effective manner in which to access data in a Data Mart.

**ASSESSMENT OF LEARNER OUTCOMES:**

1. Problems will be assigned in class and will be evaluated to assess student progress and to assist in the development of competencies.

2. A maximum of four major exams will be given throughout the course of the semester.

3. Grades will be weighted and assigned as follows:

   Exams = 50% of the total grade  
   Drawings(Plates) = 50% of the total grade

   A = 100-91  
   B = 90-81  
   C = 80-71  
   D = 70-69  
   F = 60 & below
SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center in Room 3354 or call 288-7670.