## KISHWAUKEE COLLEGE SYLLABUS

Semester, Year: Spring, 2016

Title of Course (# of Credits): Systems Analysis and Design, 3 Credit Hours

Prefix, Course Number, Section: CIS 238 5001

Class day(s), Class time, Class Location: Tuesday/Thursday, 11:00 AM-12:15 PM, A 1350

Start and end dates: 01/19/2016-05/20/2016

Instructor name: Susan Grever

Office location: A 1343

Office hours: Monday 12:00-12:20 PM and 1:50-2:50 PM, Tuesday 1:50-2:20 PM and 5:30-5:50 PM, Wednesday 12:00-12:20 PM and

1:50-2:50 PM, Thursday 1:50 - 2:30 PM.

Office phone or Administrative Assistant: (815) 825-2086 ext. 3230 Division Secretary- Shelley at Kishwaukee College 815-825-2086 x2030

Office hour by appointment: Times may be requested Monday, Tuesday, Wednesday, and Thursday.

Instructor Kishwaukee College email: susan.grever@kishwaukeecollege.edu

D2L Instructor email: sgrever@kish.desire2learn.com (preferred for class correspondence)

### COURSE DESCRIPTION

This course will present the fundamentals of system analysis and design as applied to information systems. Topics will include an in depth study of the system development life cycle including both traditional structured design and object oriented design, available tools used in the process, the development of user interfaces, the development of documents and the interactions of the analyst with peers and users necessary for the successful completion of a project. A group project will be completed in this course. Three hours lecture/discussion a week.

**IAI Number: None** 

Prerequisite: CIS 110 or CIS 111 or CIS 150 or CIS 160

# STUDENT LEARNING OUTCOMES (SLO)

On completion of this course the student will be able to:

- 1. Explain the phases of the system development life cycle.
- 2. Analyze an information system.
- 3. Design a solution based on the analysis of a problem.
- 4. Explain the importance of scope when analyzing and developing an information system.
- 5. Explain the importance of and produce the necessary documents during the phases of the system development life cycle.
- 6. Explain the terms used in system analysis and design.
- 7. Explain the roles of the various individuals involved in the cycle.
- 8. Use various tools for modeling system requirements and project management.
- 9. Explain considerations for user interfaces.

### **TEXT**

REQUIRED:

Rosenblatt, Harry J. Systems Analysis and Design, 10th Edition. Boston, MA: Course Technology, Cengage Learning 2014

## REQUIRED STUDENT MATERIALS

- 1. Access to a computer.
- 2. Access to the Internet
- 3. USB drive or some method to store and transport files.

## ADDITIONAL STUDENT REFERENCES AND THEIR LOCATION

• Quizzes, exam, homework assignments, class handouts and notes will be in Desire2Learn: https://kish.desire2learn.com/

## BREAKDOWN OF COURSE REQUIREMENTS

| Item       | Points per Item | <b>Total Points</b> |
|------------|-----------------|---------------------|
| Final Exam |                 | 100 points          |

| Midterm Exam  |                | 100 points |
|---|----------------|------------|
| 15 Quizzes  | 10 points each | 150 points |
| 3 Project Reports                                     | 40             | 120        |
| 12 Case Studies                                       | 20             | 240        |
| 3 Toolkit Labs  | 20             | 60         |
| Total points  |                | 770 points |
| Exams 25.9%, quizzes 19.5%, Projects 46.8%, Labs 7.8% |                |            |

### FINAL GRADE DETERMINATION:

Grade reports will not be mailed out. Please check KishSOS, My Student Info, under Academic Profile, Grades, for grade reports.

Grades will be determined using the following scale.

A 90 - 100% of total points (770 - 693)

B 80 - 89.9% of total points (692 - 616)

C 70 - 79.9% of total points (615 - 539)

D 60 - 69.9% of total points (538 - 462)

F below 60% of total points (461 and less)

Grades will be calculated on the total points possible for the semester. Should the actual total points vary from the proposed total points, the grades will be calculated on the actual total points.

### **COURSE EXIT REQUIREMENTS**

There are no course exit requirements.

### TENTATIVE COURSE OUTLINE: Course outline is subject to change.

This is a tentative outline of the course. For specific exam, quiz or programming project due dates use the class schedule page. Details, assignments, quizzes, notes and dates will be updated throughout the semester.

Week 1: Jan 19 syllabus; System Planning: Chapter 1 Introduction to Systems Analysis and Design, Jan 21 System Planning: Chapter 1 Introduction to Systems Analysis and Design System Planning

Week 2: Jan 26 System Planning: Chapter 2 Analyzing the Business Case. Chapter 1 quiz and Case Studies due at 11:00 AM. Jan 28 Tool Kit Part A Communication Tools, Google Docs.

Week 3: Feb 2 System Planning: Chapter 3 Managing Systems Projects. Chapter 2 quiz and Case Studies due. Feb 4 Microsoft Projects lab. Tool Kit Part A quiz due at 11:00 AM.

Week 4: Feb 9 Review requirements for preliminary report; Chapter 3 quiz and Case Studies due 11:00 AM. Feb 11 Tool Kit Part B CASE Tools.

Week 5: Feb 16 Visio Lab. Draft prelimiary reports due at 11:00 AM.

Feb 18 Systems Analysis: Chapter 4 Requirements Modeling. Tool Kit Part B quiz due at 11:00 AM

Week 6: Feb 23 Systems Analysis: Chapter 4 Requirements Modeling. Completed preliminary reports due. Feb 25 Continue chapter 4 Requirements Modeling, DFDs and FDDs. Chapter 4 Quiz and Case Studies due.

Week 7: Mar 1 Systems Analysis: Chapter 5 Data and Process Modeling.

Mar 3 Systems Analysis: Data and Process Modeling.

Week 8: Mar 8 Answer questions, work on projects and data modeling. Chapter 5 Quiz due.

Mar 10 Midterm. Chapter 5 Case Studies due

Mar 14 - 20 Spring Break, no classes

Week 9: Mar 22 Systems Analysis: Chapter 6 Object Modeling

Mar 24 Systems Analysis: Chapter 6 Object Modeling

Mar 24 Spring Friday, no classes.

Week 10: Mar 29 Systems Analysis: Chapter 7 Development Strategies. Chapter 6 quiz and case studies due Mar 31 Tool Kit Part C Finanial Analysis Toolkit.

Week 11: Apr 5 Systems Design: Chapter 8 Output and user Interface Design. Chapter 7 quiz and Case Studies due. Apr 7 Systems Design: Chapter 8 Output and user Interface Design. Tool Kit Part C Finanial Analysis Toolkit quiz due.

Week 12: Apr 12 Systems Design: Chapter 9 Data Design; Chapter 8 quiz and case studies due.

Apr 14 Systems Design: Data Design Chapter 9. Draft Systems Requirement document due Apr 15 Faculty/Staff In-Service (No Classes).

Week 13: Apr 19 Systems Design: Chapter 10 System Architecture; Chapter 9 quiz and case studies due Apr 21 Faculty/Staff In-Service (No Classes)

Week 14: Apr 26 System Implementation: Chapter 11 Managing System Implementation; Chapter 10 quiz and case studies due Apr 28 System Implementation: Chapter 11 Managing System Implementation; Final Systems Requirement Document due

Week 15: May 3 System Support and Security: Chapter 12 Managing Systems Support and Security; Chapter 11 quiz and case studies due May 5 System Support and Security: Chapter 12 Managing Systems Support and Security

Week 16: May 10 Work on projects; Chapter 12 quiz and case studies due May 12 Review, System Design Specifications due

Final Exam May 17 Tuesday Final Exam, Chapters 5 through 12, present completed projects PowerPoints 10-11:50 AM

### MAKE-UP POLICY

## Quizzes:

Quizzes CAN NOT BE MADE UP. Quizzes are available for a one week period in Desire2Learn and as such are considered take home assignments.

#### Exams:

Exams are to be taken at the day and time scheduled. In the case of an excusable absence or illness, the instructor MUST BE NOTIFIED IN ADVANCE. A makeup of that exam will be scheduled at the instructor's convenience. If the instructor has not been notified before your return to class, there will be no makeup of that exam. No final exams will be given before the last regular class date.

## ATTENDANCE POLICY

All students are expected to attend class on time and to be prepared. Should you miss a class it is your responsibility to determine what was covered during your absence. Please use the class schedule posted on the instructor's website and check with fellow students. Students will be working on a group project for this class. Any student missing class will need to coordinate with fellow students on project requirements and required work. Students should be prepared to spend time outside of class on reading and assignments.

## OTHER COURSE REQUIREMENTS

## ASSIGNMENTS:

All assignments are submitted in Desire2Learn with a specified date and time. Assignments will be available at least one week prior to the due date. Once the drop box for an assignment is closed (the due date and time is passed) it will not be possible to submit the assignment. No assignments will be accepted once the drop box is closed **unless prior arrangements have been made**. If you can not turn in an assignment on time you must e-mail the instructor in Desire2Learn at least 12 hours prior to the assignment due date and time.

For this course students will be working alone and in groups to complete a group project. Each group will recieve one point total which is given to all members of the group. Students may complete separate parts of the project or collaborate on all sections of the project. It is up to the group to decide how members will be submitting each section. Group members have the option of completing sections that a fellow member fails to provide or accepting the reduction in points. If a group decides that a member is not pulling their weight in the group they may choose to fire a member from the group. Any student who is fired from the group has two options, attempt to be hired by another group or complete all the sections of an assignment on their own.

Students will be asked to report on group participation at the end of the project. Those reports will be used to adjust points if necessary. Group members will be asked to report the percent of the project completed by each member. The percents will then be averaged. Points for the project are then pooled and the average percent used to add or subtract points from each student's individual score. The instructor reserves the right to adjust percentages based on observations.

#### EXAMS:

The midterm and final exam will be multiple choice, true/false, and/or short answer exam. No books or notes will be allowed.

#### **QUIZZES**

Quizzes are given in Desire2Learn. Students will have from 5 days to a week to complete the quizzes. Since the quizzes will be done outside of class they are considered open book exams. Any short answer questions must be answered with the students own words. Any answers where the text book or another published source is recognizable will be given a 0.

## BEHAVIOR:

Students are expected to show respect toward other students and their work. Behavior inconsistent with this goal is NOT allowed in the classroom and is grounds for expulsion from the class.

## E-MAIL FOR THIS CLASS:

All class e-mail correspondence must be sent using the e-mail provided by Desire2Learn. All e-mail received in Desire2Learn is answered within a twenty four hour period. E-mail outside of Desire2Learn should be used only in case of a failure of the Desire2Learn server. If a

student uses the instructor's regular e-mail account it will be treated as non critical and answered when time permits, usually within one week.

#### CELL PHONES:

All cell phones and pagers must be turned off when entering the classroom. If you are expecting an emergency call during class, please advise the instructor before class starts so that an exception to this rule may be made. Any student using a cell phone during an exam will be assumed to have finished the exam at that time and the exam will be collected for grading immediately.

#### COMPUTER LABS:

Please be aware that students are expected to spend time outside of class completing assignments. If you do not have a computer at home with the necessary software, you will need to use the computer lab. The schedule is posted at the lab. **Food and beverages are not permitted in the lab or the classrooms**. Lab assistants are available at certain times for assistance with technical problems, but may not be able to help with specific questions about software operations and/or assignments.

### **CLASS WITHDRAWAL**

A "W" cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at "My Class Schedule" on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee College catalog.

#### INCOMPLETE GRADE

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an "Incomplete" (I) grade may be given. Taking an Incomplete is possible only at the instructor's discretion. To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time. If the conditions of the contract are not met, an "I" grade may revert to an "F".

#### CLASS CANCELLATIONS

Class cancellations due to inclement weather will be posted on the College Website: www.kishwaukeecollege.edu. or announced by the local radio stations. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door and posted at <a href="https://www.kishwaukeecollege.edu/class\_cancellations">www.kishwaukeecollege.edu/class\_cancellations</a>. Room changes will be announced in advance whenever possible and posted on the classroom door.

## ACADEMIC DISHONESTY

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

#### **COPYRIGHT**

As a Kishwaukee College Student, you may have copyrighted materials or software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense. You are required to abide by the specific copyright and licensing agreements that apply to each particular piece of software.

## RECORDING OF CLASSES/PRESENTATIONS:

Kishwaukee College prohibits students from electronically recording class lectures and presentations (either by audio, video, picture, or otherwise) unless certain qualifying conditions are met. For more information about this College procedure and the qualifying conditions, please visit: <a href="http://www.kishwaukeecollege.edu/go/recordingclasses">http://www.kishwaukeecollege.edu/go/recordingclasses</a>

# GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS

All students intending to graduate with an A.A., A.S., A.E.S., or A.F.A. are required to submit a complete Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the complete Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at <a href="https://www.kishwaukeecollege.edu/portfolio">www.kishwaukeecollege.edu/portfolio</a>.

### ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A1317 or at (815) 825-2086 ext 3960, (815) 825-9106 (TTY), or send an email to awilson@kishwaukeecollege.edu. The student's disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

## **LEARNING SKILLS CENTER (A1300)**

Students must present their Kishwaukee College student ID when using any Learning Skills Center services. For more information on the Learning Skills Center go to <a href="http://www.kishwaukeecollege.edu/go/lsc">http://www.kishwaukeecollege.edu/go/lsc</a>. Tutoring is available to all Kishwaukee students free of charge. The

Writing Center (Learning Skills Center, A1306) answers your writing-related questions regardless of the class or assignment. Students are expected to bring all material related to the assignment, including textbooks, paper prompts, etc.

Make-up tests, online tests, and placement tests are available through Testing Services, also located in the Learning Skills Center

## **EMERGENCY PROCEDURES/SAFETY**

Yellow and red Emergency Information flipcharts are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus.

## **RELIGIOUS OBSERVANCES**

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

### STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the only way to receive official notices from the College. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

## **COMMUNITY RESOURCES**

There are numerous community resources that are available to assist students in addressing a variety of personal needs. A listing and description of community resources can be found at <a href="http://www.kishwaukeecollege.edu/go/communityresources">http://www.kishwaukeecollege.edu/go/communityresources</a>