New Jersey Institute of Technology
College of Computing Sciences
Department of Informatics

IS 678- IT Service Management Course Syllabus
Sections 102 and 852 – Spring 2018

Instructor: David F. Ullman
Associate Provost for Information Services & Technology and CIO
Office: 5212 Guttenberg Information Technology Center
Phone: (973) 596-2915 * E-Mail***: david.ullman@njit.edu***

Description

Prerequisites: IS 663 or CS 673 This course introduces the Information Technology Infrastructure Library (ITIL) fundamentals of the service management life cycle-service strategy, service design, service transition, service operation, and continual service improvement. ITIL provides a comprehensive, consistent, and coherent framework of best practices for IT Service Management (ITSM), which promotes a quality approach for achieving business effectiveness and efficiency in the use of information systems. This course presents the basic terminology and an overview of the functions and processes for each of the life cycle phases as they apply to IT Management. Although ITIL is originally presented as an approach for designing IT processes, we can expand this view and apply it to the design of other business services. Possible semester-long contexts are the processes of an educational services provider or health care services provider.

Required Background:

The course catalog description lists pre-requisites of IS 663 or CS 673.

- If you do not have the pre-requisites, please discuss with me.
    - With prior course work or industry experience in Information Systems, instructor may grant permission.
    - We do not recommend taking IS 678 in the first semester of graduate work without prior industry experience.
    - MBA students should have prior management course work and industry experience.
- Students for whom English is not their native language must recognize the challenge of learning a significant body of knowledge with terminology presented in a context that may also be unfamiliar.
- Note: International students may risk full-time status for withdrawals based on lack of proper background.

Course Objectives

At the end of this course, the student should be able to:
1. Understand and explain the basic terminology and concepts of ITSM.

2. Understand and explain the functions, roles and processes for each of the phases of the ITIL Service Lifecycle.
3. Apply a service-oriented approach to business systems design and operations in order that an organization is more efficient and effective.
4. Understand, explain, analyze, and critique the concept of IT Service Management (ITSM).
5. Students should also be prepared to sit for the ITIL Foundation certification exam.

Required Text

Foundations of IT Service Management, Brady Orand. April 2013. www.ITILtaBrady.com
ISBN: 1466231327

Also, five publications by BMC software provided electronically in Moodle:

- *Best Practice Insights: Focus On ITIL Service Strategy For ITIL 2011*
- *Best Practice Insights: Focus On ITIL Service Design For ITIL 2011*
- *Best Practice Insights: Focus On ITIL Service Transition For ITIL 2011*
- *Best Practice Insights: Focus On ITIL Service Operation For ITIL 2011*
- *Best Practice Insights: Focus On ITIL Continual Service Improvement For ITIL 2011*

Please be aware there are many references available on ITIL. For anything you reference, please be sure it covers ITIL 2011 and not ITIL V3 or prior versions.

Honor Code

Any evidence of cheating in any form, including plagiarism, will be dealt with according to the honor code of NJIT (course failure and suspension or expulsion). Please note: There will be no warnings or chances with regard to cheating. Any discovered case of cheating will be immediately passed to the Dean of Students for further investigation. You may not only fail this course but also be suspended from NJIT. The full text of the NJIT Honor Code is available for your review at http://www.njit.edu/academics/honorcode.php

Two points in particular:
- The course has two exams, ad ministered online, that are designed as closed book. Special software must be installed on your computer to take the exams. Your computer's camera will monitor your actions. Violation of exam rules (e.g. using hidden notes or other references) would also be a violation of the Honor Code.
- It is your responsibility to understand the rules for properly citing the work of others in group projects and the individual paper. Improper citation with a simple "copy/paste" from online sources may be grounds for failure of the assignment and/or the course.

Course Structure

1. The course is divided into seven **Modules**
   - Module 01 - Introduction
   - Module 02 – Service Strategy
   - Module 03 – Service Design
   - Module 04 – Service Transition

- Module 05 – Service Operation
- Module 06 – CSI, Service Automation, and other approaches to ITSM
- Module 07 – Course Conclusion and Final Exam
2. Each Module has one or more **Units** of lecture material that may be covered over several weeks.
3. Each Unit of lecture is further divided into several smaller parts for ease in consumption. (e.g. Unit #1A, Unit #1B, Unit #1C, etc.)
4. Each Module generally has several individual and group activities:
   - Group Discussion
   - Group Project
   - Quiz on Lecture Material
5. There is a Midterm Exam at the end of Module 03, and a cumulative Final Exam at the course conclusion.

Hy-Flex Instructional Delivery

IS 678 will be delivered using *NJIT Hy-Flex Learning* This is a way of delivering instruction that integrates online and onground students into a single learning community, converging the physical and virtual classrooms.

Within the *NJIT Hy-Flex Learning* delivery model, there is no distinction between online and onground courses. Curriculum delivery is independent of time and place, allowing for student (and instructor) to "attend class" in any of three modes:

- onground – the traditional face-to-face classroom model;
- synchronous online – same time, different place; utilizing video conferencing technologies;
- asynchronous online – different time, different place; utilizing lecture archival technologies.

Regardless of the sections in which you have enrolled, you may choose to "attend" class in any of the modes above. All sections are combined in a single learning community in Moodle and students from all modes of attendance will work collaboratively on the same group projects, using some of the same tools as global project teams in industry. Student attendance may vary from one week to the next, depending on individual circumstances. One mode may have advantages at a particular time (e.g. when student is travelling for work). However, all students are held to the same standards and look to achieve the same learning outcomes for the course.

Learning Management System

We shall be using NJIT's instance of the Moodle learning management system (http://moodle.njit.edu/) for discussion, sharing of instructional materials, assignment submission, quizzes, and more. Students officially enrolled in IS 678 are automatically added to this Moodle course for all sections offered by this instructor. Please upload a recent face picture of yourself into your Moodle profile to facilitate getting to know one another.

Regarding Groups and Collaborative Work

Class members come to IS 678 with a myriad of backgrounds, experiences and opinions. Everyone will benefit from everyone else's knowledge. The class is being structured so that groups are assigned randomly for project work and online discussions. This will maximize the opportunity for you to share your experiences with others and learn from one another. Please draw on your professional and previous academic experience throughout the course.

Online Group Discussion Forums

There will be five graded discussions during the course, one each in Modules 2-6 covering each of the ITL Service Lifecycle stages. Each discussion is approximately two weeks in length. Please review the semester calendar for specific due dates. The rubric for assessment is posted in Moodle. Each student is expected to make one original posting to a question, and at least two "value-added" comments on another student's original post. Full credit for original postings must be made by the date shown on the semester schedule. Cumulative participation in all five Forums is 10% of the course final grade.

Online Quizzes

There will be five graded quizzes during the semester on each of the ITIL Service Lifecycle Stages. Each quiz is meant to review and test your knowledge of the material covered. You will be able to take each quiz as many times as you like before the cut-off date to raise your grade. The questions for each quiz are typical of those found on the ITIL Foundation Exam. The five quizzes account for 10% of the course final grade.

Group Reports on ITIL Lifecycle Phases

Pre-assigned groups of students will work as a team to prepare a report to describe the processes and functions for the ITIL lifecycle phases of service strategy, service design, service transition and service operation applicable to a specific business organizational services domain. The team will post group reports by the due dates within Moodle. The reports will be your collective results of describing and applying IT service management concepts appropriate to the service domain for each of the first four lifecycle phases. The four reports will follow a similar structure and be graded using rubrics posted with the assignment. The four reports account for 50% of the course final grade.

A word of caution on the group reports: Do not take the questions asked in the reports and simply divide by the number of group members, and "paste together" the result for submission. Each group should elect a "Leader" once the groups are announced. All members of the group should take a first attempt at all questions, and the group should meet, discuss answers, and then decide how the best results can be integrated into a single, coherent document.

Groups that simply divide the work among group members and then simply append parts together are likely to earn poor grades. The report must be written from a consistent perspective and read as a cohesive whole.

Exams

There is a mid-term and a final exam, both with the following format:

1. Both exams are online and require you to install the Respondus Lock-down Browser as a tool to help ensure academic integrity. More information will be posted in Moodle.
2. Both exams are given at a scheduled time and you must take the exam online at the given hour:
   - Mid-term Exam – Tuesday, March 6 - 6:00 PM – 7:30 PM
   - Final Exam, Tuesday, May 8 - 6:00 PM – 8:30 PM
3. Both exams are closed book, no notes. You have one opportunity to take each.
4. You may bring a computer and take the exam in-class, or take it privately at another location.
5. Both exams have a set of questions taken from the same question bank as quizzes, and several short-answer essay questions that will test your understanding of ITIL best practices and key concepts.
6. The midterm exam covers material through Module 03, the Service Design lifecycle phase. The final exam is cumulative.
7. The Midterm Exam accounts for 10% of the final grade, and the Final Exam 20%.

Grading and Assessment

All Group Projects will be graded on this scale:

GRADE	GPA	SIGNIFICANCE
A	4.0	Excellent
B+	3.5	Good
B	3.0	Acceptable
C+	2.5	Marginal Performance
C	2.0	Minimum Performance
D	1.0	Poor
F	0.0	Failure

Points earned for all five Group Discussion Forums will be summed at the end of the course and the letter grade assigned will be: **A**: 90% and above; **B+**: 85% - 89.4%; **B**: 80% - 84.4%; **C+**: 75% - 79.4%; **C**: 70% - 74.4%; **D**: 60% - 69.4%; **F**: Below 60%.   The five graded quizzes and the Final Exam will have letter grades assigned based on the same percentages.

Final Course Grades will tentatively be assigned with the following weights. There may be slight modifications, depending on issues that arise during the semester. Grading is based on both group and individual efforts:
- Online Group Discussion Forums – 5 Forums – Total 10%
- Online Quizzes – Five quizzes – Total 10%
- Group Reports on Service Lifecycle Phases – 4 Reports - Total 50%
- Midterm Exam – 10%

- Final Exam – Total 20%
- Total: - 100%

NJIT Academic Policy has final grades for graduate courses assigned using the above scale, without the "D" letter grade. Therefore, final averages below a "C" receive a letter grade of "F".
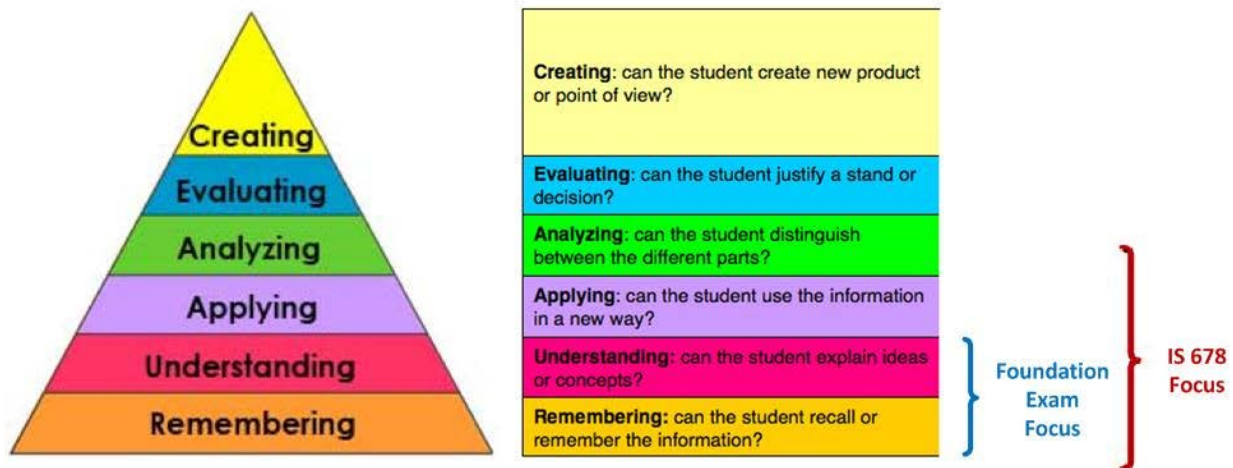
UNEXCUSED LATE ASSIGNMENTS WILL NOT BE ACCEPTED.

Topics of the course

A weekly schedule of course topics is appended to the syllabus and posted separately in Moodle. There are readings from the text and a separate publication from BMC software on each of the five ITIL lifecycle phases, supplemented with academic and practitioner papers. The four group reports require you to understand material and **apply it.**

This course is based on ITIL, the Information Technology Infrastructure Library, a set of "best practices" for IT service management, which is used globally. Even if you have been working in the field of IT for a number of years, it is critically important that you understand ITIL terminology and the distinctions among terms used. Think about learning ITIL as learning a new language. There are a lot of basics you must understand before you can communicate effectively.

I call your attention to Figure 1 below that outlines Bloom's Taxonomy of learning objectives. In order to pass the ITIL Foundation exam, you need only remember and understand the foundation principles of ITIL for a 40-question exam. For IS 678 you are expected to not only remember and understand ITIL concepts and terminology, but be able to apply them and do some analysis appropriately in a realistic organizational setting. This is course is far more than simply preparation for passing the ITIL Foundation Exam.

Figure 1: Bloom's Taxonomy Applied to IS 678

Miscellaneous:

- If you send me e-mail, please put **IS 678** in the SUBJECT LINE so I can filter your e-mails to be read quickly (as opposed to them being ignored as junk e-mail).
- Your success in the course and in passing the ITIL Foundation is dependent on your clear understanding of ITIL terminology and distinctions among terms and concepts. I encourage you to review the **ITIL Glossary** often when submitting any assignment for grading, including postings to Graded Discussion Forums.
- ITSM and ITIL are current and relevant topics for the IT practitioner. A number of useful references will be made available in Moodle. Review these in addition to the textbook.
- I am generally on campus 5 days per week, but may not be available to meet with students. For a face-to-face meeting, please call my office to check if I am available to meet with you. You may also call my office to schedule a video chat.
- There will be a few weeks when in-class lectures will not be held because I will be travelling. In most cases, there will be a synchronous Web-Ex at the scheduled class hour (I have used this format previously while in Moscow, Russia; Negril, Jamaica; and in other cities across the U.S.) Alternatively, lectures will be made available asynchronously.

IS 678 – Outline/Weekly Schedule – Spring 2018 Semester

Week	Module	Date	Topic	Textbook (Brady Orand :BO)	Quiz -Closes at 11:55 PM	Group Discussion Forum Closes 11:55 PM	Group Report Due by 11:55 PM
1	01	1/16	Unit #0: Course Introduction; Unit #1: Introduction to IT Service Management	BO: pp 17-64		Introductions Due Monday, Jan 22	
2	02	1/23	Unit #2: Foundation Concepts of ITSM		Quiz #1 Closes Monday, Feb. 12	Original Posts by Friday, Feb. 9.	Report #1 Due Monday, Feb. 19.
3		1/30	Unit #3: Service Strategy Lifecycle Principles	BO: pp. 65-84		Forum #1 closes Friday, Feb. 16.	
4		2/6	Unit #4: Service Strategy Processes	BO: 85-106			
5	03	2/13	Unit #5: Service Design Lifecycle Principles	BO: 107-116	Quiz #2 Closes Monday, Mar. 5	Original Posts by Friday, Mar. 2.	Report #2 Due Monday, Mar. 19.
6		2/20	Unit #6: Service Design Processes – Part I	BO:117-166		Forum #2 closes Friday, Mar. 9	
7		2/27	Unit #6: Service Design Process – Part II				
8	04	3/6	**Mid-term Exam** – See Syllabus Requirements Unit #7: Service Transition Lifecycle Principles	BO: 167-176	Quiz #3 Closes Monday, Apr. 2	Original Posts by Friday, Mar. 30.	Report #3 Due Monday, Apr. 9.
		3/13	*** Spring Break – Enjoy! ***			Forum #3 closes Friday, Apr. 6.	
9		3/20	Unit #8: Service Transition Processes – Part I	BO: 177-218			
10		3/27	Unit #8: Service Transition Processes – Part II				
11	05	4/3	Unit #9: Service Operation Lifecycle Principles	BO: 219-226; 261-284	Quiz #4 Closes Monday, Apr. 16.	Original Posts by Friday, Apr. 13.	Report #4 Due Monday, Apr. 23.
12		4/10	Unit #10: Service Operation Processes	BO: 227-260		Forum #4 closes Friday, Apr. 20.	
13	06	4/17	Unit #11: Continual Service Improvement	BO: 285-304	Quiz #5 Closes Monday Apr. 30.	Forum #5 closes Friday, May. 4.	
14		4/24	Unit #12: Service Automation and Other Approaches to IT Service Management	BO: 305-312; Readings in Moodle			
		5/1	**_*** NJIT Classes Follow a Friday Schedule ***_**				
15	07	5/8	**Final Exam** – Please see syllabus requirements.				