

**New Jersey Institute of Technology
College of Computing Sciences
Department of Information Systems**

IS 678- IT Service Management Course Syllabus

Sections 102 and 852 - Spring 2017

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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

IT Service Management Based on the ITIL® 2011 Edition, Pierre Bernard, Van Haren Publishing, October 2014. ISBN Hardcopy: 978 94 018 0017 4

Note there are many reference books 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>

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. At the conclusion of the course there is a Final Exam

Converged Instructional Delivery

IS 678 will be delivered using **NJIT Converged LearningSM**. 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 Converged LearningSM** 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.

All three modes of attendance are combined within the **NJIT Converged ClassroomSM** where the latest collaborative technologies are leveraged to facilitate active learning, engagement and collaboration among faculty and groups of students. Student teams from all modes of attendance work on group projects using 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.

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.

Final Exam

The final exam is in two parts:

1. An in-class exam in a format similar to the ITIL Foundation Exam and the quizzes given throughout the semester. You have one opportunity to pass the exam. All students must be on campus for this exam on Tuesday, May 9, 2011 at 6:00 PM. Any exceptions to this because of distance (e.g. out of state, 50 miles or greater) must be approved before spring break.
2. A set of several more subjective essay questions which will test your understanding of ITIL best practices and lessons learned about ITSM. This may be done as a take-home exam.

Depending on the exam delivery format, you may be required to bring a portable computer for the exam, and to install special software on it to ensure academic integrity for exam results (i.e. discourage cheating). More information on this will be posted in Moodle.

Grading and Assessment

All Group Projects and the essay portion of the Final Exam 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%
- Final Exam – Total 30%
- 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

1. Overview of the ITIL Service Lifecycle and how the components fit together
2. Organization design in terms of functions and processes
3. Service Strategy phase of the lifecycle and its processes
4. Service Design phase of the lifecycle and its processes
5. Service Transition phase of the lifecycle and its processes
6. Service Operation phase of the lifecycle and its processes and functions
7. Continual Service Improvement phase of the lifecycle and the seven-step improvement process.
8. Process Metrics, Key Performance Indicators (KPIs) and Critical Success Factors (CSFs) for each phase
9. Other approaches to ITSM.

There are readings from the text on each of the five major 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.

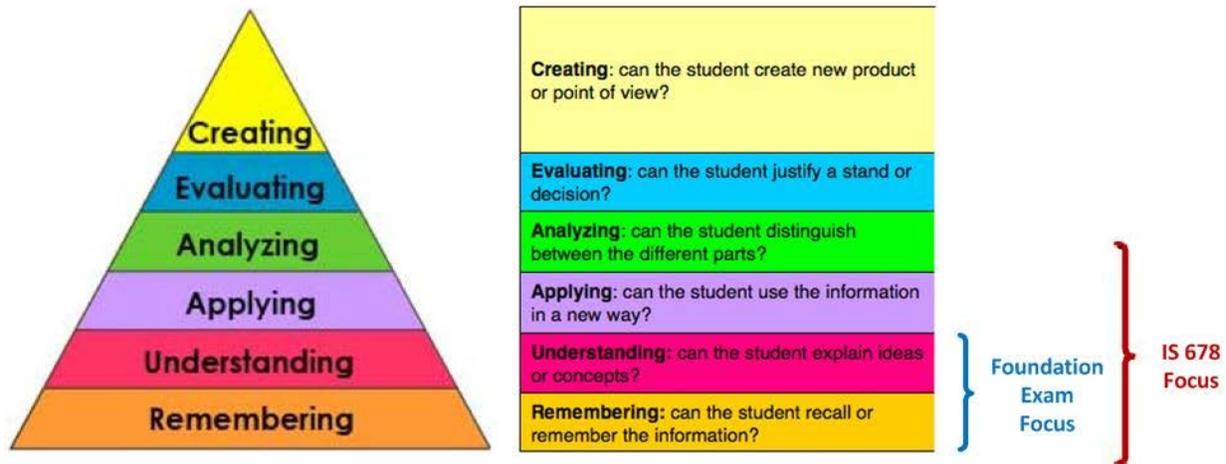


Figure 1: Bloom’s Taxonomy Applied to IS 678

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 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.
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*** Final – Spring 2017 ***

IS 678 – Outline/Weekly Schedule – Spring 2017 Semester

Week	Module	Date	Topic	Textbook	Quiz - Closes at 11:55 PM	Group Discussion Forum Closes 11:55 PM	Group Report Due by 11:55 PM
1	01	1/17	Unit #0: Course Introduction; Unit #1: Introduction to IT Service Management	Chapters 1,2, Chapter 3(skim)		Introductions Due Monday, Jan 23	
2	02	1/24	Unit #2: Foundation Concepts of ITSM	Chapters 1,2	Quiz #1 Closes Mon Feb 13	Original Posts by Fri Feb 10. Forum #1 closes Fri. Feb 17	Report #1 Due Mon, Feb. 20.
3		1/31	Unit #3: Service Strategy Lifecycle Principles	Chapter 4			
4		2/7	Unit #4: Service Strategy Processes	Chapter 4			
5	03	2/14	Unit #5: Service Design Lifecycle Principles	Chapter 5	Quiz #2 Closes Mon. Mar 6	Original Posts by Fri Mar 3. Forum #2 closes Fri. Mar 10	Report #2 Due Mon, Mar. 20.
6		2/21	Unit #6: Service Design Processes – Part I	Chapter 5			
7		2/28	Unit #6: Service Design Process – Part II	Chapter 5			
8	04	3/7	Unit #7: Service Transition Lifecycle Principles	Chapter 6	Quiz #3 Closes Mon. Apr 3.	Original Posts by Fri Mar 31. Forum #3 closes Fri. Apr 7	Report #3 Due Mon, Apr 10.
		3/14	*** Spring Break – March 12-19 ***				
9		3/21	Unit #8: Service Transition Processes – Part I	Chapter 6			
10		3/28	Unit #8: Service Transition Processes – Part II	Chapter 6			
11	05	4/4	Unit #9: Service Operation Lifecycle Principles	Chapters 3,7	Quiz #4 Closes Mon Apr 17	Original Posts by Fri Apr 14. Forum #4 closes Fri. Apr 21	Report #4 Due Mon, Apr 28.
12		4/11	Unit #10: Service Operation Processes	Chapter 7			
13	06	4/18	Unit #11: Continual Service Improvement	Chapter 8 Readings in Moodle	Quiz #5 Closes Friday, May 5	Forum #5 closes Sunday. May 6	
14		4/25	Unit #12: Service Automation and Other Approaches to IT Service Management				
		5/2	Tue May 2, Classes Follow a Friday Schedule				
15	07	5/9	Final Exam – Please see syllabus requirements.				