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

IS 678- IT Service Management Course Syllabus  
Sections 851 – Fall 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  
Web-Ex Office Hours: Tuesday, 5:30 PM 6:00 PM and by Appointment  

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.  
• 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

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.

Academic Integrity

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:


Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. *Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu*.

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 that are discussed later in this syllabus:
   - Online Group Discussion
   - Group Project Report
   - 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.

Instructional Delivery
IS 678 will be delivered entirely online this semester, i.e. all course activities will be completed through the Moodle learning management system (http://moodle.njit.edu). Students officially enrolled in IS 678 are automatically added to this Moodle course for all sections offered by this instructor. There are no required face-to-face sessions but students are expected to follow a week-by-week schedule as outlined in this syllabus. Work is typically done in an asynchronous mode and students can complete the coursework without coming to campus. However, there are several group projects where you will need to meet and coordinate with members of a group to complete assigned work. This may be done in a technology-mediated format. There is a mid-term and a final exam that require you to participate at a day and time as specified later in the syllabus and acknowledged in the learning management system.

Regarding Groups and Collaborative Work

Class members come to IS 678 with a myriad of backgrounds, experiences and opinions. All can benefit from each other’s background and experiences. The class is structured so that groups are assigned randomly for project report work and online discussions (if the class is large). 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 online discussions, one for each of Modules 2-6 covering each of the five ITIL service lifecycle stages. Each 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 discussions 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 Project Reports

There will be three group project reports where pre-assigned groups of students will work as a team to prepare a group project report to describe aspects of the processes and functions for the ITIL lifecycle stage of (i) service strategy, (ii) service design, and (iii) both the service transition and service operation stages. The project report will be in the context of a specific business organizational services domain that will be announced and described in Moodle.

So as to maximize the individual and collective learning (and contributed efforts) for each group project report, each student will be required to submit an individual working draft for the entire report by a specified date. Once submitted, groups will be assigned and the group members will have 10 days to combine individual working drafts into a final group project report.

Submission of the working draft by the specified due date will be worth 10% of the group project report grade. Drafts will be graded simply as “Acceptable” – full credit or “Unacceptable”, implying minimal or no effort with no credit for the draft. Copying of another class member’s draft and submitting it as one’s own is a violation of the academic integrity policy.
During the 10-day collaborative period, group members should meet, discuss answers, and decide how the best results can be integrated into a single coherent document, written from a consistent perspective and read as a cohesive whole. The three reports account for 50% of the course final grade.

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 date and time and you must take the exam online at the given hour:
   - Mid-term Exam – Tuesday, October 30, - 6:00 PM – 8:00 PM
   - Final Exam, Tuesday, December 18 - 6:00 PM – 8:30 PM
3. Both exams are closed book, no notes. You have one opportunity to take each.
4. 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. These are typical of concepts touched on in discussions and the project reports.
5. The midterm exam covers material through Module 03, the Service Design lifecycle phase. The final exam is cumulative.
6. If you have a Face-to-Face exam scheduled at that hour, special arrangements may be made to take the exam at an earlier or later time period reasonably close to the stated time.
7. The Midterm Exam accounts for 10% of the final grade, and the Final Exam 20%.

Grading and Assessment

There are two different grading scales used for the course as shown in following table.

<table>
<thead>
<tr>
<th>SCALE #1: LETTER GRADE SCALE</th>
<th>SIGNIFICANCE</th>
<th>SCALE #2: PERCENTAGE TO LETTER GRADE SCALE</th>
<th>CALCULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>A</td>
<td>90% and above</td>
</tr>
<tr>
<td>B+</td>
<td>Good</td>
<td>B+</td>
<td>85% - 89.4%</td>
</tr>
<tr>
<td>B</td>
<td>Acceptable</td>
<td>B</td>
<td>80% - 84.4%</td>
</tr>
<tr>
<td>C+</td>
<td>Marginal Performance</td>
<td>C+</td>
<td>75% - 79.4%</td>
</tr>
<tr>
<td>C</td>
<td>Minimum Performance</td>
<td>C</td>
<td>70% - 74.4%</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>D</td>
<td>60% - 69.4%</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>F</td>
<td>Below 60%</td>
</tr>
</tbody>
</table>

1. All Group project reports are graded using Scale #1 (Letter grade Scale).
2. Points earned for all five Online Group Discussion Forums will be summed at the end of the course and the letter grade assigned will be according to the percentage earned.
3. The five graded quizzes, mid-term and final exam have letter grades assigned based on the same percentages.
4. 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 Project Reports – (Service strategy and service design project reports – 15% each; Combined service transition and service operation – 20%) - Total 50%
   - Midterm Exam – 10%
   - Final Exam – Total 20%
   - Total: - 100%
5. NJIT Academic Policy has final grades for graduate courses assigned using the Letter Grade Scale above, without the “D” letter grade. Therefore, final averages below a “C” receive a letter grade of “F”.
6. The Moodle Gradebook does not handle mixed scales well. Therefore, the final average computed in the Moodle Gradebook may not be correct. However, the individual components will be accurately recorded. **Unexcused late assignment submissions will not be accepted.**

**Topics of the course**

A weekly schedule of course topics is appended to the syllabus and posted separately in Moodle. This course is based on ITIL (formerly an acronym for Information Technology Infrastructure Library) a globally used set of best practices for IT service management that focuses on aligning IT services with the needs of business. Even if you have been working in the field of IT, it is 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 course is far more than simply preparation for passing the ITIL Foundation Exam.

![Bloom's Taxonomy Applied to IS 678](image-url)
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 Online 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 schedule a Web-Ex meeting before, during, or after normal business hours. I will be very flexible on scheduling such recognizing this is an online course.
## IS 678 – Outline/Weekly Schedule – Fall 2018 Semester

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Date</th>
<th>Topic</th>
<th>Textbook (Brady Orand: BO)</th>
<th>Quiz - Closes at 11:55 PM</th>
<th>Group Discussion Forum Closes 11:55 PM</th>
<th>Group Project Report Due by 11:55 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01</td>
<td>9/4</td>
<td>Unit #0: Course Introduction; Unit #1: Introduction to IT Service Management</td>
<td>BO: pp 17-64</td>
<td></td>
<td>Introductions and Exam Confirmations Due Monday, Sep 10</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>9/25</td>
<td>Unit #4: Service Strategy Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>05</td>
<td>10/9</td>
<td>Unit #6: Service Design Processes – Part I</td>
<td>BO: 117-166</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>10/16</td>
<td>Unit #6: Service Design Process – Part II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>06</td>
<td>10/23</td>
<td>Unit #7: Service Transition Principles</td>
<td>BO: 167-176</td>
<td>Quiz #3 Closes Monday, Nov. 12</td>
<td>Original Posts by Friday, Nov. 9. Forum #3 closes Friday, Nov. 16.</td>
<td>Individual Draft Due: Friday, November 30</td>
</tr>
<tr>
<td>9</td>
<td>07</td>
<td>10/30</td>
<td>Mid-term Exam – See Syllabus Requirements Unit #8: Service Transition Processes – Part I</td>
<td>BO: 177-218</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>09</td>
<td>11/13</td>
<td>Unit #9: Service Operation Principles</td>
<td>BO: 227-260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>10</td>
<td>11/20</td>
<td>Thanksgiving – NJIT Classes Follow Thursday Schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>11</td>
<td>11/27</td>
<td>Unit #10: Service Operation Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>13</td>
<td>12/11</td>
<td>Unit #12: Service Automation and Other Approaches to IT Service Management</td>
<td>BO: 305-312; Readings in Moodle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>14</td>
<td>12/18</td>
<td>Final Exam – Please see syllabus requirements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last Updated September 3, 2018