



Syllabus

SCHOOL OF MANAGEMENT ITMGMT 570: Maintaining the Technology Infrastructure

3 Credits
Effective: Summer 2020/2021

*Access to the Internet is required.
All written assignments must be in Microsoft-Word-compatible formats.
See the library's APA Style Guide tutorial for a list of resources that can help you use APA style.*

FACULTY

Faculty Name: FACULTY NAME

Contact Information: CONTACT INFORMATION

[INSTRUCTOR MAY INSERT PERSONAL MESSAGE IF DESIRED]

COURSE DESCRIPTION

Designing, developing, implementing and installing a technology infrastructure is a complex process that involves maintaining the infrastructure with a high level of reliability and availability while providing effective support for the end users. This course examines how Information Technology Infrastructure Library (ITIL) and other frameworks combine best practices and standardized processes and procedures to enable an effective service infrastructure. Students will gain experience in the planning, coordination and management skills needed to manage or work with an IT service organization.

COURSE RESOURCES

To find a list of the required and recommended resources for this course, please consult your [Course Document Lookup](#).

COURSE OUTCOMES

In this course, learners:

- Demonstrate how organizations use frameworks, such as ITIL to effectively manage technology services.
- Outline how IT services are aligned with company strategy.
- Explain the concept, content, and implementation of service levels and Service Level Agreements.
- Evaluate the processes used to implement and maintain new technology.
- Evaluate how organizations handle service incidents, problems, and user support.
- Outline processes for monitoring and managing performance, capacity, and availability of IT services.
- Employ and evaluate techniques to manage external service providers and cloud services.

OVERVIEW OF COURSE GRADING

The grades earned for the course will be derived using City University of Seattle's decimal grading system, based on the following:

<i>Overview of Required Assignments</i>	<i>% of Final Grade</i>
Course Activities	20%
Knowledge Checks	10%
Service Level Agreement	20%
ITSM Framework Process Flow	10%
Service Framework Case Study Analysis	20%
Vendor Management Plan Third Party Cloud Services	20%
TOTAL	100%

SPECIFICS OF COURSE ASSIGNMENTS

The instructor will provide grading rubrics with more detail as to how this assignment will be graded.

Course Activities

The instructor will determine a set of activities that support the course outcomes and major assignments of the class. These activities could include: collaboration, discussion, participation, peer-review, learning reflections, learning checks or other activities online or in-class. Descriptions are provided by the instructor in the course.

<i>Components</i>	<i>% of Grade</i>
Engagement	100%
TOTAL	100%

Knowledge Checks

Students complete knowledge checks to reinforce course concepts. The knowledge checks test students on the material in the textbooks and module content. All knowledge checks are open book, and students may use notes. However, students may not collaborate on answers.

<i>Components</i>	<i>% of Grade</i>
Accuracy of Solutions	100%
TOTAL	100%

Service Level Agreement

Students will prep for a negotiation and write a service level agreement for a company for email services. Students should choose either a company they are familiar with or select a company and make some assumptions about what would be important to them about email services.

Assume that the company chosen has been running email in-house on their own servers. Management has decided that it would be more cost effective to move mail services to the cloud under an IaaS (Infrastructure as a Service) agreement. Students will prep for a negotiation for a service level agreement for the new cloud services.

To prepare for the negotiation, students will make a list of strategic and tactical objectives they think should be covered in a Service Level Agreement for IaaS email support. Students should make sure company strategy and objectives in addition to IT's concerns are considered.

Students will use the negotiation objectives to prepare a Service Level Agreement (students will assume they got what they wanted during the negotiations). The easiest way to do this is to modify an existing SLA. Cloud service providers like IBM, Amazon, HP, Microsoft and others all have standard SLA's students can use as a template.

Students will submit a 1-2 page summary outlining the strategic and tactical negotiation objectives they researched are important to the company and IT strategy for email services. The summary will also explain how their updated SLA addresses those objectives. Students will also submit an updated SLA which addresses their objectives to complete the assignment.

Provide 3 references from research into what makes a good SLA in standard APA format.

<i>Components</i>	<i>% of Grade</i>
APA style (citations/reference list)	5%
Service Levels	40%
Presentation of Results	15%
Assignment Requirements	20%
Processes	20%
TOTAL	100%

ITSM Framework Process Flow

IT Service Management is primarily a list of processes needed to effectively maintain the IT Infrastructure. ITSM Processes are inter-related. Understanding the dependency and sequence of recommended best practices is an important part of implementing ITSM. Students will create a flow chart showing the relationship between the following ITSM processes:

Service Management

Event Management

Incident Management

Problem Management

Application Management

Change Management

Release Management

Configuration Management

Operation Management

Technical Management including Capacity and Availability Management

Use a format that shows who is doing what by using a swim lane process flowchart. The instructor will provide an example.

The process owners to be represented in the swim lanes should at a minimum contain:

Users with problems

Users with requests

The Service Desk

Technical Support (Break Fix)

Applications Development and Maintenance

A Change Control Board

IT Operations

To keep things simple, assume all processes are run in house and there are no third-party services. Students' flowcharts should clearly show who owns which processes and how they are linked together. Students may add IT departments and processes if they feel they are needed to improve the basic process.

<i>Components</i>	<i>% of Grade</i>
Process Flow and Linkage	50%
Process Owners	25%
Formatting	25%
TOTAL	100%

Service Framework Case Study Analysis

Students will locate and analyze a case study of a company that implemented a service framework such as ITIL.

The library has access to a large variety of case studies. The student should choose a case study that is current within the last 5-7 years and should represent an academic peer reviewed case study rather than a commercial facsimile of a case study.

The case study analysis should be thorough and examine issues the company was experiencing that indicated a framework was needed, how the framework was applied, issues the company encountered in implementing the framework, and the results of the effort. The analysis should also include lessons learned and recommendations the student provides for avoiding or overcoming issues which arose in the implementation.

The instructor will provide a case study analysis format. Students should include references to relevant

course materials and references from their research in a standard APA format.

<i>Components</i>	<i>% of Grade</i>
ITIL & Frameworks	60%
APA Style (formatting)	5%
Assignment Requirements	20%
Writing and References	15%
TOTAL	100%

Vendor Management Plan Third Party Cloud Services

Students will select an IT service of their choosing which will be delivered using Cloud based services. The service can be an application supporting a business (SaaS), a platform service (PaaS) or an infrastructure service (IaaS). Students will research vendors that provide a solution for their selected IT service. Based on their research the students will compare and contrast the vendor options available for their selected IT service.

Students' research will also include comments from cloud services reviews and users of the services being reviewed. A strategy should be developed to address these comments and be factored into the vendor management plan.

Select one of the vendors and then create an outline of a vendor management plan for the recommended vendor. The vendor management plan should outline the steps that would be taken to manage the vendors performance with explanations for why the steps are important.

Along with the vendor management, the student will provide commentary discussing why the plan elements were chosen.

Formulate and write the paper to include the following content:

A description of the IT Service being evaluated for third party vendor management.

A description of the three vendors selected to potentially provide the service.

A comparison of the services offered from the three cloud vendors.

Summary of reviews of the three vendor services.

A discussion on what would be needed in a vendor management plan tailored to strengths and weakness identified in the comparison of services and the reviews of services.

Please provide references from the vendors' research sources in a standard APA format.

<i>Components</i>	<i>% of Grade</i>
3rd Party Services	60%
APA style (citations/reference list)	5%
Style and Mechanics	15%
Assignment Requirements	20%
TOTAL	100%

COURSE POLICIES

Late Assignments

LATE ASSIGNMENT

Participation

PARTICIPATION

Professional Writing

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

UNIVERSITY POLICIES AND STUDENT SUPPORT SERVICES

As a City University of Seattle student, you are responsible for understanding and adhering to all university policies. CityU also provides additional services for students. A comprehensive list of the most current versions of all university policies and services can be found in the [University Catalog](#).

Academic Integrity

City University of Seattle defines a violation of academic integrity as any act that constitutes cheating or misrepresentation of the author of an individual's scholarly work. Student behavior that demonstrates academic dishonesty or evidences lack of academic integrity is strictly prohibited.

- [Academic Integrity Policy & Procedures](#)

Safe Educational Environment

City University of Seattle is committed to supporting an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the university.

- [Title IX Information & Procedures](#)
- [Canadian Sexual Violence and Misconduct Policy](#)

Disability Accommodations Statement

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Support Services to discuss accommodation requests and eligibility requirements.

- [Disability Support Services](#)