ITM305 Semester Project

**Objective:** Provide practical experience in creating a complete network diagram by CISCO 3 Tier Architecture model with MS Visio in a collaborative team work environment. This semester project stresses critical thinking and creative decision ­making skills in order to obtain a satisfactory solution.

**Due Date:** There are multiple due dates and deliverables, please refer to our course schedule for detail due date info. We do not accept any late work submission. Entire Group Late work will result in a -10% credit for the entire team. Individual late work will result in an automatic 1 group violation strike.

**Semester Project Case:** The City of Boise is soliciting your consulting group to propose and design a new innovative campus that will be seating on a 10 acre land located in the downtown area.  
  
Each student in the group is responsible to design ONE 2 story Building that will be built to their specification. In order to encourage your creativity and innovative energy, you are not tied to a certain budgetary restriction. All building must adhere to CISCO 3 Tier Architecture design and guidelines.  
 **1) Building A must serve the local Boise business community.  
2) Building B must serve the local treasure valley area citizens.  
3) Building C must serve the BSU student community.  
4) Building D must be the centralize IT dept that manages and**

**serves all the campuses’ IT infrastructure and needs.**

**Group Presentation:** Each member is allocated a minimum of 3 mins to discuss the team’s project proposal along with a professional powerpoint presentation. The group presentation should concentrate on the act of convincing the audience (“The City of Boise) to choose their team and their campus design plan. If a member is unable to present, that member will lose -20pts from his/her individual final grade.

**Project Deliverables:**

1) A coherent and uniform network diagram encompassing all the

Building (A – D) with notations used in the diagram (sizing, icon

type, naming, labelling …..etc). The final proposal network

diagram must look like it was finished by a single consultant team

instead of by multiple consultants.

2) All Subnetting must utilize Private Network IP with the use of NAT

(Network Address Translation).

3) All nodes must be labelled correctly with distinct IP address and

VLAN (if applicable) with a consistent naming convention.

4) A table of all subnet info (Subnet IP, CIDR, Subnet Mask, Usable

IP addresses & Broadcast IP) must be included.

5) Group’s PowerPoint Presentation Slides

Project Part A = Complete CISCO 3 Tier Architecture Network Diagram For Building A – D.

Project Part B = NAT, Subnetting Info, VLAN & Node Naming Convention.

**Grading Criteria:** Each minor error exhibited in your network diagram will incur a -2 pts penalty each and not cumulative (E.g. If you have 4x Icon size that are not consistent with the rest of the diagram; this will result in a -2 x 4 = -8pts penalty …etc).

Each major error exhibited in your network diagram will incur a -5 pts penalty each and not cumulative. (E.g. If you have 3x nodes that have no IP Info or identity; this will result in a -5 x 3 = -15pts penalty…etc).

**It is under the discretion of the Instructor what/which error constitute as a major error or minor error.**

**Note: The instructor also scheduled 2x Quality Control Sessions, so students will have a chance to correct any error before cumulating error penalty. Make sure to take advantage of those sessions. Please refer to the course sessions for those Quality Control dates.**

**Group dynamics and regulations:** Each team member must adhere to their group rules and work together as a team towards the completion of the semester project. If the team determines that a group member is being disruptive, not completing group task, breaking the group rule .....etc, and by the vote of the majority, the group leader must send a complain email to the instructor. This will count as one violation strike towards the team member. A team member that cumulated 2 violation strikes will automatically be expelled from their group.

**ANY INCIDENT MUST BE REPORTED WITHIN 1 WEEK OF IT’S OCCURRENCE. WE WILL NOT TAKE ANY ACTION OR GRADE ADJUSTMENT ...etc. after the 1 WEEK STATUE OF LIMITATION.**

**THE INSTRUCTOR RETAINTS THE RIGHT TO REMOVE ANY GROUP MEMBER FROM THEIR GROUP IF HE DETERMINES THAT THE GROUP MEMBER IS DETRIMENTAL TO THE GROUP AND OTHER STUDENT/S IN THE GROUP. SUCH STUDENT WILL REMAIN GROUP-LESS THROUGHOUT THE SEMESTER AND WILL NOT BE ABLE TO EARN ANY CREDIT FROM THE GROUP PROJECT.**

If there is a tie breaker in any group decision, the instructor will decide on the outcome of the group as the acting tie breaker. Please do not put yourself and your classmates in this difficult situation. You will receive a **ZERO credit** if you are expelled from your group and will not be allowed to participate in any group project in the semester.

**Total Available credit for the Semester Project:**

100 pts divided into multiple components (40 pts = Network Diagram, 40 pts = Subnetting & VLAN, 10 pts Group Presentation & 10 pts = Group PowerPoint & additional Presentation Visual Aids & Materials

NOTE: Penalties will be applied towards the entire group and not specific to group member that made the error. This is a semester **GROUP** project and will be graded as such manner.

**Final Individual Grade and Peer Evaluation:** Assuming you are in a group of 3 members (including yourself), and your project has a score of 80/90 points and your team presentation has a score of 10/10 points. Therefore, your group semester’s project is worth 80 + 10 – any penalty (assuming no penalty in this calculation) = 90pts. However, here is how we determine your individual score for the semester project.

Assuming in your peer evaluation, you were evaluated at 80/100, 100/100 and 70/100 on your evaluation by 2 of your peer and yourself. Therefore your overall grade % is 80 + 100 + 70 – Any penalties (Assuming there is no penalty in this calculation) = 250/300 = 83.33% Your final individual score for the project is 83.33% out of 90 pts = 74.97 pts.

All peer evaluations are 100% strictly confidential. Please make your best effort to contribute and be a proactive member of your group. Under no circumstance any outside rules and requirement for the semester project will supersedes the requirements and point system listed on this document. If you are unsure of any item on this semester project document please come and discuss with me before the due date.