TDC 376 – Network Projects

Course Overview

The Network Projects course brings together topics learned throughout the students' undergraduate coursework in a series of realistic and reflective projects as well as class discussions.

The students will be given realistic Case Study projects involving businesses and community groups with disparate networking needs, user requirements and budgets. Students will need to analyze how the network infrastructure may impact the users in their daily activities, communication and interpersonal interaction.

Students will develop detailed communication solutions to fulfill these needs and requirements while considering the social, ethical and economical impact of these solutions.

Students will also perform research on how access to technology impacts individuals and populations we will discuss these aspects in class.

Students will be responsible for the full implementation of a realistic corporate infrastructure in the telecommunication laboratory.

For the "Major Case Study" the students will work in small consulting groups competing for the network implementation business of a large corporation.

Pre-req – TDC 365

Learning Domain Description

TDC 376 – Network Projects is included in the Liberal Studies program as a course with credit in the Senior Year Capstone domain. Students are required to take a Liberal Studies capstone course in their major field during their senior year. Some Liberal Studies capstone courses may be offered jointly for students in related majors and fields of study. These courses provide students with an opportunity to integrate their major area of study with broader issues raised in their general education program. The Liberal Studies capstone experience allows students to see the relationship between the ideas, perspectives, and substantive areas of scholarship and creative work within their major field and those learned through significant aspects of their course work in the learning domain courses and other courses and experiences of the Liberal Studies Program.

Learning Outcomes

1. Students should apply one or more theories or concepts from courses within their major to an analysis of a particular issue relevant to the major.
2. Students should be able to discuss an idea, method or concept from a discipline outside their major field of study to an analysis of a particular issue relevant to their major field of study. This may include identifying perspectives and/or values of the major field, and comparing them with those of one or more disciplines outside the major.

How Learning Outcomes Will Be Met

1. Students will analyze the network infrastructure requirements of different types of businesses and develop solutions.

2. Students will look at how laws and compliance impact the functional requirements of the network infrastructure and its management.

Writing Expectations

Students will be expected to complete a minimum of 10 pages of writing for this course.

How Writing Expectations Will Be Met

1. Students must write a short design document for a non for profit case study - 20 pages

2. Students must write a complete redesign document for the case study in groups of 4-5 students. Deliverable typically is over 150 pages long

Textbooks and Printed Resources

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Grading

IMPORTANT:

Grading will be group-based but an individual grade adjustment coefficient (0.7-1.3) will be applied based on peer assessment and instructor's observations.

Mini project	10%
Implementation	20%
Individual Presentation	10%
Individual "business injects"	10+%
Major Case Study	50%
Timesheets	May be penalized up to -10% if missing

Note: Each class missed beyond the first will lead to -10% on the final grade

Grading Scale: (This may change to your advantage later)

A	93-100%
A-	90 – 92%
B+	87-89%
B	84-86%
B-	80-83%
C+	77-79%
C	74-76%
C-	70-73%
D+	67-69%
D	61-66%
F	≤ 60%

Week-by-week Assignments/Readings

Week 1: Class Overview, background Survey; Presentation of Mini Case Study; Network Design Methodology Overview; Mini Case Study Assigned; Team Assigned (if feasible)

   Course Introduction.
   Discussion of Mini Case Study.

   Documents Due: None

Week 2: Network Design Methodology Overview (Continue);
   Analysis and discussion of technological requirements for a community-based, non-for-profit organization such as the one presented in the Mini Case Study. Analysis and discussion : impact of the cost to technology for organizations with limited budgets.

   Major Case Study Overview.

   Mini Case Study Group Meetings and Work.
   In-class discussion of technology requirements for a community-based non for profit organization
   All groups start work on main case study network design.

   Documents Due:

    Claim a subject for your presentation

    Subject for your presentation ASSIGNED
    Week 1 Timesheets

Week 3: Student Presentation of Mini Case Study;
   Presentation of Digital Divide Research Assignment.
   Major Case Study Overview (Continue).

   All groups present mini-case study

   Documents Due:
    - Mini Case Study – Short Report
    - Week 2 Timesheets.
    - Optional: Written questions for Major Case Study

Week 4:   Design and implementation work;

General Vendor/Customer Conference. Open discussion of the questions submitted, the business requirements and application requirements for the major case study. Groups A and B start work on network implementation. All groups work on possible WAN technologies

First set of student presentation in class

Documents Due:
- Week 3 Timesheets.

Week 5:   Work on major-project design or Lab work.

Client inspection of network infrastructure (Group A – B). Group C – D are assign to network implementation.

Second set of student presentation in class

Documents Due:
- Implementation Presentation due
- Week 4 Timesheets.

Week 6:   Design and Implementation Work.

In-class work on Major Case Study.

Documents Due:
- Week 5 Timesheets.

Week 7:   End of implementation work; Customer meetings.

In-class work on Major Case Study. Each group will also have private meeting time with customer.

Documents Due:
- Digital Divide Research Paper
- Week 6 Timesheets.

Week 8:   Digital Divide Discussion.

In-class Discussion on the impact of technology on society.

Documents Due:
-    Week 7 Timesheets.
-   Draft/Skeleton Case Study Report Due

Week 9:   Design work. Individual discussion of draft report.

Documents Due:
-    Week 8 Timesheets.

Week 10:   Major Case Study Presentations
Presentation of Major Case Study Design – Feedback and Discussion

Documents Due:
-    Final Report Due.
-    Week 9 Timesheets.

Week 11:   Major Case Study Presentations
Presentation of Major Case Study Design – Feedback and Discussion

Documents Due:
-    Final Report Due.
-    Week 10 Timesheets.

Students Roles

Student will work in groups of 4 students (but may be up to 6 students). Each team will be a consulting group working on the design for the customer and the implementation of a complete enterprise infrastructure for another customer.

Instructor Roles

The instructor will serve many roles:

1. The consulting service manager. Monitor progress of the consulting teams and serve as liaison with the customer.

2. The customer.

3. Technology expert. Consultants will be able to access its expertise and ask questions when necessary.

Class Deliverables:

1. Mini Case Study Design Report.

2. Implementation of an enterprise infrastructure and "as-built" documentation.

3. In class presentation

4. Detailed Network Design.

5. Weekly timesheets for consulting activities and work performed.

College Policies

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed

the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in CampusConnect.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at http://academicintegrity.depaul.edu/. If you have any questions be sure to consult with your professor.

Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: cdm.depaul.edu/enrollment.

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: csd@depaul.edu.

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