

The Threaded Case Study Rubric

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All of these deliverables/components below should be converted to HTML and saved as one, Zipped, web site). A series of linked, organized HTML files is the best deliverable format.

| # | Location | TCS Deliverable / Component |
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| 1 | Sem 3, Mod 4, LAN Design TCS | LAN Design Deliverables (see Teacher's Guide, Sem 3, Mod 4, "Labs") 1. User requirements document for LAN implementation (WORD or PowerPoint or HTML) |
| 2 | Sem 3, Mod 4, LAN Design TCS | 2. Submit Overall design document which will include: 2a) Logical LAN design model of school (CONFIGMAKER, HTML) |
| 3 | Sem 3, Mod 4, LAN Design TCS | 2b) Complete physical design document including: (Use PhotoShop to Mark up architectural drawings) |
| 4 | Sem 3, Mod 4, LAN Design TCS | 2c) Detail of all MDF/IDF rooms including a to-scale diagram (PhotoShop, HTML) |
| 5 | Sem 3, Mod 4, LAN Design TCS | 2c) Quantity of HCC and VCC and LAN Switch ports required to meet the existing and projected growth needs (WORD or EXCEL or PowerPoint and HTML) |
| 6 | Sem 3, Mod 4, LAN Design TCS | 2d) Specifications on type and quantify of cable media for all horizontal and vertical runs (WORD or EXCEL or PowerPoint and HTML) |
| 7 | Sem 3, Mod 4, LAN Design TCS | 2e) Develop and document the IP addressing scheme for the district (WORD or EXCEL and HTML) |
| 8 | Sem 3, Mod 4, LAN Design TCS | 2f) Analyze network for positive and negatives features. (WORD or EXCEL and HTML) |
| 9 | Sem 3, Mod 4, LAN Design TCS | 3. Each group to prepare and present to the class their overall district IP addressing scheme for consideration. (ORAL PRESENTATION and DISCUSSION) |
| 10 | Sem 3, Mod 4, LAN Design TCS | 4. Students will study the concepts involved in the learning objectives and apply each to their design. This will require a paragraph on how the learning objectives relate to their design. Learning objectives can be grouped together for the purpose of explanation. (WORD or PowerPoint and HTML) |
| 11 | Sem 3, Mod 5, ACL Design TCS | ACCESS LIST DELIVERABLES 1. Students will Document the purpose of the ACLs and create a logical diagram describing the overall effect of these ACLs on the entire district network (CONFIGMAKER AND WORD and HTML) |

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| 12 | Sem 3, Mod 5, ACL Design TCS | 2. Students will document the router commands sequence required to implement the ACL on their schools router. (SCREEN SHOT from router console or NOTEPAD or PowerPoint and HTML) |
| 13 | Sem 3, Mod 5, ACL Design TCS | 3. Students will document the effect of the ACL as it relates to traffic flow across their schools LAN and the overall district network. (WORD or PowerPoint and HTML) |
| 14 | Sem 3, Mod 5, ACL Design TCS | 4. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups. (WORD or PowerPoint and HTML) |
| 15 | Sem 3, Mod 6, IGRP Design TCS | IGRP Deliverables 1. Students will document the networks that will be advertised by the router located at their site. (WORD or PowerPoint and HTML) |
| 16 | Sem 3, Mod 6, IGRP Design TCS | 2. Students will document the IGRP autonomous network number for the School district. (WORD or PowerPoint and HTML) |
| 17 | Sem 3, Mod 6, IGRP Design TCS | 3. Students will document the router command sequence needed to implement IGRP on the schools router. (SCREEN SHOT from router console or NOTEPAD or PowerPoint and HTML) |
| 18 | Sem 3, Mod 6, IGRP Design TCS | 4. Students will describe the process that the routers go through to insure that the neighbor routers are aware of the status of all networks in the autonomous system. This will include frequency which routing table updates are send and effects of the updates on bandwidth utilization. (WORD or PowerPoint and HTML) |
| 19 | Sem 3, Mod 6, IGRP Design TCS | 5. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups. (WORD or PowerPoint and HTML) |
| 20 | Sem 3, Mod 7, IPX Design TCS | IPX Deliverables 1. Students will document the effects of Novell IPX traffic on their schools LAN and the district WAN including projected increase in traffic loads and traffic patterns. (WORD or PowerPoint and HTML) |
| 21 | Sem 3, Mod 7, IPX Design TCS | 2. Students will submit a proposal for the overall district IPX network number addressing scheme and be prepared to present this to the class. An addressing scheme will be selected by the class based on the proposals. (WORD, ORAL PRESENTATION and DISCUSSION) |
| 22 | Sem 3, Mod 7, IPX Design TCS | 3. Students will document the changes in the router configuration to conform to the users requirements and list the appropriate commands need to implement these changes. (SCREEN SHOT from router console or NOTEPAD and HTML) |
| 23 | Sem 3, Mod 7, IPX Design TCS | 4. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups.(WORD or PowerPoint and HTML) |
| 24 | Sem 4, Mod 3, WAN Design TCS | WAN Design Deliverables 1. Students will submit their proposal for the district wide WAN and be prepared to present their solution to the class. The proposal should include: 1a) Wan line speeds and upgrade path |

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| 25 | Sem 4, Mod 3, WAN Design TCS | 1b) Model of traffic flow between schools showing a 2 or 3 layer WAN hierarchy (PhotoShop, HTML) |
| 26 | Sem 4, Mod 3, WAN Design TCS | 1c) Listing of additional equipment such as DSU/CSUs and router interfaces required to implement the district wide WAN (WORD or PowerPoint or EXCEL and HTML) |
| 27 | Sem 4, Mod 3, WAN Design TCS | 1d) Explanation of what redundancy is designed into the network to insure WAN uptime. (WORD or PowerPoint and HTML) |
| 28 | Sem 4, Mod 3, WAN Design TCS | 1e) Summary of the overall benefits of their design (CONFIGMAKER AND WORD and HTML) |
| 29 | Sem 4, Mod 3, WAN Design TCS | 2. Class will decide on best overall WAN strategy and implement one strategy for the overall district WAN. (CONFIGMAKER AND WORD, ORAL PRESENTATION and DISCUSSION) |
| 30 | Sem 4, Mod 3, WAN Design TCS | 3. Students will document all router commands necessary for reconfiguration of routers in order to implement WAN strategy. (SCREEN SHOT from router console or NOTEPAD and HTML) |
| 31 | Sem 4, Mod 3, WAN Design TCS | 4. Students will document how a WAN implementation effects routing updates between routers. (WORD or PowerPoint and HTML) |
| 32 | Sem 4, Mod 3, WAN Design TCS | 5. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups. (WORD or PowerPoint and HTML) |
| 33 | Sem 4, Mod 4, PPP Design TCS | PPP Deliverables 1. Students will document how PPP works on the WAN and the benefits of this protocol verses other layer 2 WAN protocols. (WORD and PowerPoint and HTML) |
| 34 | Sem 4, Mod 4, PPP Design TCS | 2. Students will document the router commands necessary to implement PPP on the router interfaces (SCREEN SHOT from router console and NOTEPAD and HTML) |
| 35 | Sem 4, Mod 4, PPP Design TCS | 3. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups.(WORD or PowerPoint and HTML) |
| 36 | Sem 4, Mod 5, ISDN Design TCS | ISDN Deliverables 1a) Students will document the insertion of ISDN in the WAN implementation including: A drawing of the implementation with all major reference points (PhotoShop, HTML) |
| 37 | Sem 4, Mod 5, ISDN Design TCS | 1b) Description of overall bandwidth available to the site and how data communications will take place (WORD or PowerPoint and HTML) |
| 38 | Sem 4, Mod 5, ISDN Design TCS | 1c) Description of all data communications equipment needed to accomplish the implementation. (CONFIGMAKER AND WORD and HTML) |
| 39 | Sem 4, Mod 5, ISDN Design TCS | 2. Students will document the router commands needed to implement ISDN on the router. (SCREEN SHOT from router console or NOTEPAD and HTML) |

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| 40 | Sem 4, Mod 5, ISDN Design TCS | 3. Students will document the benefits of ISDN for this type of implementation (WORD or PowerPoint and HTML) |
| 41 | Sem 4, Mod 5, ISDN Design TCS | 4. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups. (WORD and PowerPoint and HTML) |
| 42 | Sem 4, Mod 6, Frame Relay Design TCS | Frame Relay Deliverables 1a) .Students will document the insertion of Frame Relay in the WAN implementation including: DLCI numbers (WORD or PowerPoint and HTML) |
| 43 | Sem 4, Mod 6, Frame Relay Design TCS | 1b) Value of the CIR (WORD or PowerPoint and HTML) |
| 44 | Sem 4, Mod 6, Frame Relay Design TCS | 1c) Description of all data communication equipment needed to accomplish implementation. (WORD or PowerPoint and HTML) |
| 45 | Sem 4, Mod 6, Frame Relay Design TCS | 2. Students will document the router commands needed to implement Frame Relay on the router. (SCREEN SHOT from router console or NOTEPAD and HTML) |
| 46 | Sem 4, Mod 6, Frame Relay Design TCS | 3. Students will document the benefits of Frame Relay for this type of implementation (WORD or PowerPoint and HTML) |
| 47 | Sem 4, Mod 6, Frame Relay Design TCS | 4. Students will submit documentation on all learning objectives and how they apply to their network design. Objectives can be grouped and addressed in logical groups. (WORD or PowerPoint and HTML) |
| 48 | x | Overall Router Configuration for Local School Router (should be the "accumulated" set of router commands used throughout the case study) |
| 49 | x | Overall Web-Based Presentation of Deliverables (5 Pts possible, HTML Web Site with index.htm file to launch the site; zipped for convenient sharing) |
| 50 | x | Overall Oral Design Defense (5 points possible -- 4 phases: present your design, answer teacher ?s about the design, answer audience ?s about the design, answer "What If" questions about modifying your design give a new problem/new demand on your network) |
| | | Total points = 100 |