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| **ELEMENT** | **CONTENT** |
| DEPARTMENT | CIS |
| AUTHOR (S) | Jack Skoda |
| COURSE NUMBER | **CIS 2235** |
| COURSE TITLE | **Advanced System Administration** |
| SHORT TITLE | Adv System Admin |
| COURSE LEVEL | 2000 |
| DATE CREATED |  |
| CHECKED/CHANGED | 10/2/2017 |
| PREREQUISITES | CIS 2151, 2230 |
| COREQUISITES |  |
| RESTRICTIONS |  |
| SPECIAL FEES | No |
| CREDITS | 4 |
| HOURS | 3 hours of lecture, 2 hours of lab per week |
| SEMESTER | Spring |
| COURSE DESCRIPTION | This course focuses on management tasks and considerations for enterprise-level information technology systems. Topics include network infrastructure components, security devices, VoIP systems, service delivery systems, and system management applications. |
| SUGGESTED TEXTS | *The Practice of System and Network Administration*; Limoncelli & Hogan |
| OPTIONAL TEXTS | *The Linux Command Line*; William E. Shotts, Jr. |
| COURSE OUTCOMES | The successful student will be able to:   1. Install and manage a wide range of enterprise information technology services |
| COURSE CONTENT | 1. Advanced shell usage 2. Cloud and local virtualization systems 3. Remote access clients and servers 4. Domain Name System services and configuration 5. Web hosting services and applications 6. Voice over IP services 7. Email services 8. Distributed authentication 9. File sharing services 10. Security applications 11. Log aggregation 12. Backup systems |
| LAB/STUDIO OUTCOMES | The successful student will be able to:   1. Install, configure, and operate several standard information technology systems |
| LAB/STUDIO CONTENT | 1. Using virtualization software 2. Installing and managing software 3. Configuring and using DNS services 4. Configuring and using web hosted applications 5. Configuring and using email services 6. Configuring and using VoIP services and call plans 7. Configuring and using IDS and firewall systems 8. Configuring and using log aggregation and reporting 9. Administrative control documentation 10. Backup and recovery tools and planning |
| LECTURE CAPACITY | 32 |
| LAB CAPACITY | 16 |
| GRADED OR P/NP | Graded |
| EVALUATION | Participation, quizzes, exams, homework, lab reports |
| DELIVERY METHOD | LEC, LAB |
| ROOM REQUIREMENTS | CIS lab for lab |
| AUTHOR’S NOTES |  |