Administrative Master Syllabus

Course Information

Course Title	Advanced Linux
Course Prefix, Num. and Title	ITSC 2325 - Advanced Linux
Division	Technology and Business
Department	Information Technology and Networking
Course Type	WECM Course
Course Catalog Description	Provides instruction in advance open-source Linux operating system. Develops directory services for clients, support users remotely, and install and configure network services.
Pre-Requisites	ITSC 1316
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours: Lab/Other Hours	3:2:2
Equated Pay Hours	3
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Department Head:	Muna Saqer, Comp Sci and IT&N Program Director	11-16-2023
Division Chair:	David Kucera, Technology & Business Division	11-16-2023
VPI:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

- Virtual Machines and Automated Installations
- Fundamental Command Line Skills
- RHCSA-Level Security Options
- The Boot Process
- Linux file system Administration
- Package Management
- User Administration
- RHCSA-Level System Administration Tasks.

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

- Install, administer, and manage advanced network environment using a Linux system
- Demonstrate advanced skills and proficiency with Linux utilities and configurations
- Deploy secure networks
- Integrate Linux networks with existing networks

Methods of Assessment:
Projects
Tests and Quizzes
Lab Assignments
Final Exam

Required text(s), optional text(s) and/or materials to be supplied by the student:

- RHCSA/RHCE Red Hat Linux 7: Training and Exam Preparation Guide. (Third or latest edition)
- USB drive
- High-speed Internet Connection

Suggested Course Maximum:

20

List any specific or physical requirements beyond a typical classroom required to teach the course.

- Current Linux operating system software (64 bit) for each student and instructor
- Current VMware Workstation for each student and instructor
- Antivirus software for each student and instructor
- Computer (64-bit CPU, 12 GB Ram, graphics cards, monitors, for each student
- Removable hard drive for each student and instructor (1 TB hard drive) Version: 3/20/2019 3
- Laser Printer
- Cat 5 network cable, RJ-45 jacks and crimper for each student and 2 cable testers
- Instructor needs 2 monitors, 2 NICs, & Data projector

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Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

    Labs.. 20-40%
    Homework............................ 20-40%
    Test & Final Exam 40-60%
    Attendance & Participation. . 0-20%

    Grade System:
    90-100%...... =A
    80-89%........ =B
    70-79%........ =C
    60-69%........ =D
    Below 60%.. =F

Curriculum Checklist:

☐**Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.

☐**Administrative WCJC Core Course**. Attach the Core Curriculum Review Forms

        ☐Critical Thinking

        ☐Communication

        ☐Empirical & Quantitative Skills

        ☐Teamwork

        ☐Social Responsibility

        ☐Personal Responsibility

☒**WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist