El Paso Community College Syllabus Part II Official Course Description

Information Technology Systems
<u>ITSY 2343</u>
Computer System Forensics
<u>3 3 : 1</u> Credits Lec Lab

I. Catalog Description

Provides an in-depth study of system forensics including methodologies used for analysis of computer security breaches. Gathers and evaluates evidence to perform postmortem analysis of a security breach. Students should have an understanding of basic computer hardware. **Prerequisite: ITSC 1301. (3:1).**

II. Course Objectives

Upon successful completion of this course, the successful student will be able to:

- A. Define computer forensics and investigation.
- B. Outline the procedures and documentation for a forensic environment.
- C. Explain the role of and employ investigation in computer forensic analysis.
- D. Implement common investigative plan(s).
- E. Utilize the Windows environment and other DOS-based systems and describe the recovery of image files on an evidence disk.
- F. Identify Macintosh and LINUX boot processes, disk structures, and forensic tools to perform data acquisition from computer drives.
- G. Record digital evidence controls within a crime scene and secure the evidence within investigative office and laboratory environments.
- H. Describe crime process, incident scenes, and warrant procedures of a typical computing-forensics case as related to the investigation of Internet fundamentals and examination of email crimes and violations.
- I. Prepare analytical reports for formal and informal settings and discuss the process of becoming an expert forensic witness and certification in forensic studies.

III. THECB Learning Outcomes (WECM)

- 1. Identify computer investigation issues.
- 2. Identify legal issues associated with computer investigations.
- 3. Collect and document evidence.
- 4. Evaluate network traffic, and evaluate recovered remnant or residual data.

IV. Evaluation

A. Pre-assessment

Students must have taken and completed ITSC 1301 (CISC 3101), "Introduction to Computers and Applications," prior to taking this course.

B. Post-assessment

This course will contain lab assignments and exams. The instructor will determine the mix of these lab assignments and exams to arrive at a grade as described in the Instructor's Course Requirements document.

C. Remediation

The instructor may provide the class, as opposed to individuals, with the means of improving a grade. The instructor will determine the timing, form, and method of remediation.

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.