

## BAKER COLLEGE STUDENT LEARNING OUTCOMES

ITS4250 Computer Forensics and Investigation
3 Semester Hours

## **Student Learning Outcomes and Enabling Objectives**

- 1. Evaluate digital forensic investigative organizational standards and practices
  - a. Create digital forensic investigative procedures and practices
  - b. Assess digital forensic investigative resources and roles
  - c. Assess digital forensic investigative legal requirements
  - d. Identify professional conduct
  - e. Prepare for investigating a forensic case
  - f. Differentiate digital forensic crimes and investigative procedures
- 2. Evaluate various digital forensic investigation tools and resources
  - a. Identify digital investigative tools based on digital crimes
  - b. Discuss resources required for investigating various types of digital crimes
  - c. Discuss roles required for investigating various types of digital crimes
  - d. Prepare a business case for developing a digital forensic lab
  - e. Analyze forensic tools to build a digital forensic lab
  - f. Determine digital forensic lab certification requirements
  - g. Develop a physical layout of a digital forensic lab
  - h. Organize forensic workstations and software
  - i. Explain how forensic hardware and software tools integrate
  - j. Identify the need for computer forensic tools
  - k. Test computer forensic tools
- 3. Assess digital forensic evidence
  - a. Determine when and how to use digital forensic tools
  - b. Collect evidence in private-sector digital crimes
  - c. Manage digital evidence
    - i. Identify digital evidence
    - ii. Secure digital evidence
    - iii. Catalog digital evidence
    - iv. Store digital evidence
  - d. Determine the best data acquisition method for an incident scene
  - e. Use multiple data forensic and acquisition tools
  - f. Identify data recovery contingencies and strategies
  - g. Facilitate computer forensics analysis addressing data-hiding techniques
  - h. Investigate e-mail crimes and violations
  - i. Explain specialized e-mail computer forensics tools

- j. Manage file systems and structures of multiple operating systems
- k. Manage the examine Startup and boot tasks of multiple operating systems
- I. Explain image files
- m. Explain data compression
- n. Describe Windows Registry controls
- 4. Prepare criminal court proceedings and testimony
  - a. Discuss role of expert testimony
  - b. Explain testimony guidelines and expectations
  - c. Describe criminal court proceedings
  - d. Discuss evidence documentation and preparation
  - e. Explain expert qualifications for testifying
- 5. Describe report preparation and documentation requirements of forensic findings
  - a. Explain the importance of forensic findings reports
  - b. Determine guidelines for writing forensic findings reports
  - c. Create report findings with forensic software tools

These SLOs are not approved for experiential credit.

Effective: Fall 2017