College of San Mateo
Course Outline

☒ New Course
☐ Update/No change
☐ Course Revision (Minor)
☐ Course Revision (Major)

Date: October 29, 2006

Department: CIS **Number:** 492

Course Title: Computer Forensics: White-Collar Crime **Units:** 3.0

Hours/Week: **Lecture:** 3 **Lab:** 1 **By Arrangement:** 1

Length of Course

☒ Semester-long
☐ Short course (Number of weeks___)
☐ Open entry/Open exit

Grading

☐ Letter
☐ Credit/No Credit
☒ Grade Option (letter or Credit/No Credit)

1. **Prerequisite** (Attach Enrollment Limitation Validation Form.)

CIS 489 or equivalent

2. **Corequisite** (Attach Enrollment Limitation Validation Form.)

None

3. **Recommended Preparation** (Attach Enrollment Validation Form.)

Eligibility for ENGL 838 or 848

4. **Catalog Description** (Include prerequisites/corequisites/recommended preparation.)

Computer Forensics: White-Collar Crime (3) (Credit/No Credit or letter grade option)
Three lecture hours and one lab hour, plus one hour by arrangement per week. Prerequisite: CIS 489 or equivalent. Recommended Preparation: Eligibility for ENGL 838 or 848. Access to a computer with Internet capability is strongly recommended. This course provides an in-depth look at white-collar crime, with emphasis on those crimes involving computers. Types of white-collar crime include mail, wire, and bank fraud, corporate fraud, securities and fiduciary fraud; tax crimes, currency-reporting crimes, bankruptcy crimes, as well as corporate, government, environmental, and computer crimes. Relevant state and federal statutes will be introduced. Forensic software and hardware suited to the collection and preservation of digital evidence will be discussed and employed in group projects. Documentation and reporting requirements for white-collar crime will be covered

5. **Class Schedule Description** (Include prerequisites/corequisites/recommended preparation.)

This course provides an in-depth look at white-collar crime, with emphasis on those crimes involving computers. Types of white-collar crime include mail, wire, and bank fraud, corporate fraud, securities and fiduciary fraud; tax crimes, currency-reporting crimes, bankruptcy crimes, as well as corporate, government, environmental, and computer crimes. Relevant state and federal statutes will be introduced. Forensic software and hardware suited to the collection and

preservation of digital evidence will be discussed and employed in group projects. Documentation and reporting requirements for white-collar crime will be covered. Credit/No Credit or letter grade option. Three lecture hours and one lab hour per week. Prerequisite: CIS 489 or equivalent. Recommended Preparation: Eligibility for ENGL 838 or 848. Access to a computer with Internet capability is strongly recommended.

6. Student Learning Outcomes (Identify 1-6 expected learner outcomes using active verbs.)

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

1. Understand the forms, causes, and consequences of white-collar crime

2. Identify the different areas of white-collar crime that involve computers

3. Explain how federal and state statutes apply to white-collar criminality

4. Discover and retrieve digital evidence using forensic hardware and software, preserving the chain of custody

5. Choose the correct computer forensic software for a white-collar case

6. Perform the steps involved in building and documenting a case, and work on group projects involving white-collar computer-based crime

7. Describe how to correctly build and document a white-collar computer-based case

7. Course Objectives (Identify specific teaching objectives detailing course content and activities. *For some courses, the course objectives will be the same as the student learning outcomes. If this is the case, please simply indicate this in this section).*

Same as Student Learning Outcomes

8. Course Content (Brief but complete topical outline of the course that includes major subject areas [1-2 pages]. Should reflect all course objectives listed above. In addition, you may attach a sample course syllabus with a timeline.)

See attached Topical Outline

9. Representative Instructional Methods (Describe instructor-initiated teaching strategies that will assist students in meeting course objectives. Include examples of out-of-class assignments, required reading and writing assignments, and methods for teaching critical thinking skills.)

The course will include the following instructional methods as determined appropriate by the instructor, in approximately the following order:

Lecture will be used to introduce new topics;

Teacher will provide actual case studies, and examples of documentation;

Teacher will provide demonstrations of current forensic hardware and software and discussion of their usefulness in retrieving digital evidence;

Class will apply methodologies in class exercises to on-going class projects;

Students will participate in an ongoing large project in teacher-organized small groups;

Teacher will invite questions AND ANSWERS from students, generating discussion about areas of misunderstanding;

Students will give individual presentations of outside readings or final project area.

10. Representative Methods of Evaluation (Describe measurement of student progress toward course objectives. Courses with required writing component and/or problem-solving emphasis must reflect critical thinking component. If skills class, then applied skills.)

Weekly textbook readings and textbook exercises comprise one portion of the out-of-class assignments. These activities primarily support objectives 2 - 4. Assessment of student contributions during class discussion time assess objectives 1 - 3. Hands on lab assignments, utilizing available computer forensic hardware and software to perform collection of digital evidence, target course objectives 4 - 7, while oral presentation of outside reading also adds to one specific topic area. Midterm and final exams provide additional complete assessment of objectives 1 - 7.

The ongoing large-scale assignment will be a small-group project to provide experience putting together a complete project investigating a fictitious fraud and retrieving evidence to build and document the case. In addition to addressing all course objectives, the intent is to provide an opportunity for students to improve their communication skills and learn to work in a cooperative environment.

11. Representative Text Materials (With few exceptions, texts need to be current. Include publication dates.)

Profit Without Honor: White-Collar Crime and the Looting of America Rosoff, Stephen et al @2004 Pearson Prentice Hall

Fraud Investigations: A Textbook on How to Conduct White Collar Crime and Financial Fraud Investigations McMahon, Rory @ 2004 RJ McMahon & Associates

White-Collar Crime in a Nutshell Podgor, Ellen and Israel, Jerold @2004 West Group

Choosing White-Collar Crime Shover, Neal et al @2005 Cambridge University Press

New Perspectives on Economic Crime Sjogren, Hans and Skogh, Goran (Eds) @2004 Edward Elgar Publishing

Prepared by: _____
(Signature)

Email address: greenm@smccd.edu

Submission Date: _____

CIS 492 – Computer Forensics: White-Collar Crime
Topical Outline

For Objective 1

1. Introduction
    a. Definition of White-Collar Crime
    b. History of White-Collar Crime
    c. Civil vs. Criminal Violations
    d. Corporate Liability
    e. Explaining White-Collar Crime – Theories and Accounts

For Objectives 2 - 3

2. Types of White-Collar Crime
    a. Mail, Wire, and Bank Fraud
        i. Scheme to Defraud
    b. Corporate Fraud
        i. Case Studies
            1. Enron
            2. Arthur Anderson
            3. WorldCom
            4. ADELPHIA
    c. Securities Fraud
        i. Insider Trading
        ii. Stock Manipulation
        iii. Global Crossing Case Study
    d. Fiduciary Fraud
        i. Banking
        ii. Insurance
        iii. Pension Fund
    e. Tax Crimes
        i. Tax Evasion
        ii. False Returns
    f. Currency Reporting Crimes
        i. Money Laundering
        ii. Mandatory Reporting Requirements
    g. Bankruptcy Crimes
        i. Bankruptcy Fraud
        ii. Concealment and False Oath
    h. Corporate Crimes
        i. Industrial Espionage
            1. Theft of Intellectual Property
            2. Data Theft
        ii. Antitrust Activity
            1. Monopoly
            2. Bid Rigging
    i. Government Crimes
        i. Corruption of Government Officials
        ii. Judicial Corruption
    j. Environmental Crimes
        i. Natural Environment
        ii. Workplace Environment
    k. Computer Crimes
        i. Credit Card Fraud
        ii. Telecommunications Fraud
        iii. Identity Theft

iv. Hacking
v. Internet Fraud
vi. Relevant Federal and State Statutes

For Objectives 3 - 6

3. Computer Forensics and White-Collar Crime
    a. Discovery of White-Collar Crime
    b. Computer Forensic Hardware and Software
    c. Forensic Accounting
    d. Prosecuting, Defending, and Adjudicating White-Collar Crime

For Objectives 4 - 7

4. Investigating Fraud Involving Computers
    a. PC or Server Used as an Instrument of the Crime
    b. Data Collection and Preservation Considerations
    c. Documentation and Reporting Requirements
    d. Group Project– Investigating and Documenting a Fictitious Fraud