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## NIJ Special Report

# **Education and Training in Fraud and Forensic Accounting: A Guide for Educational Institutions, Stakeholder Organizations, Faculty, and Students**

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# **Education and Training in Fraud and Forensic Accounting: A Guide for Educational Institutions, Stakeholder Organizations, Faculty, and Students**

This document was developed and approved by the Technical Working Group for Education in Fraud and Forensic Accounting

## **Technical Working Group on Education in Fraud and Forensic Accounting**

Supported and approved by the National Institute of Justice (NIJ), the Technical Working Group on Education in Fraud and Forensic Accounting (TWG) is a diverse group of content area experts: professionals working across the broad spectrum of activities that constitute fraud prevention, deterrence, detection, investigation, and remediation (hereinafter “fraud”) and forensic accounting. Members of the TWG represent corporate and industry stakeholders, professional services providers, law enforcement, the legal community, government and regulatory stakeholders, professional organizations, and academics specializing in fraud and forensic accounting. These individuals have voluntarily contributed their time, ideas, and insights because of their special interest in developing stronger fraud and forensic accounting education and training.

As a preliminary step to creating the TWG, the cochairs of this activity created a planning panel composed of educators and professionals. The planning panel had two objectives: first define the scope of the project by developing the larger strategies that would steer the efforts of the group and then identify subject matter experts from across the country to serve on it. Planning panel and TWG participants were nominated from the following stakeholder groups: Academicians working in the area of fraud and forensic accounting; public accounting firms, including the “Big 4” firms; the American Institute of Certified Public Accountants (AICPA); audit committee members; the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF); corporate representatives working in the area of fraud and forensic accounting; the Federal Bureau of Investigation (FBI); the Institute of Internal Auditors; the Internal Revenue Service (IRS); the legal community; the National White Collar Crime Center; the Association of Certified Fraud Examiners (ACFE); the Public Company Accounting Oversight Board (PCAOB); the Securities and Exchange Commission (SEC); and other professional service providers and stakeholder organizations.

During an 18-month period, the 14 members of the planning panel and additional 32 members of the TWG worked together to develop this guide. The following pages list the planning panel and TWG participants; their affiliations; and their titles, backgrounds, or areas of expertise.

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<b>Name</b>	<b>Affiliation(s)</b>	<b>Title/Background/Area of Expertise</b>
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The National Institute of Justice (NIJ) and West Virginia University (WVU) wish to thank the members of the TWG, especially those serving on the planning panel, for their effort and dedication to the enhancement of education in fraud and forensic accounting. The TWG members are nationally recognized subject matter experts representing corporate and industry stakeholders, professional services providers, law enforcement, the legal community, government and regulatory stakeholders, professional organizations, and academicians who have generously given their time to draft, revise, review, and finalize this document. We are also grateful to the representative organizations for their flexibility and support in releasing their subject matter experts to see this project to completion.

WVU would like to thank President David Hardesty, Provost Gerald Lang, Vice President for Research John Weete, Director of Forensic Initiatives Max Houck, Deans of the College of Business and Economics Jay Coats and Steven Sears, and Division of Accounting Directors Ann Pushkin and Tim Pearson for their support, dedication, and commitment to this project. We also would like to recognize the volunteer assistance of WVU students Sarah Blevins, Lynn Flink, and Joseph Hager; the graduate assistance of Jason Thomas and Stephanie Concordora; and especially the assistance of Joanne Taylor, who worked on this project from inception to completion.



# Education and Training in Fraud and Forensic Accounting: A Guide for Educational Institutions, Stakeholder Organizations, Faculty, and Students

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# **Education and Training in Fraud and Forensic Accounting: A Guide for Educational Institutions, Stakeholder Organizations, Faculty, and Students**

## **Task Statement**

*As academic institutions contemplate the addition of fraud and forensic accounting into their curricula, there is a need for an in-depth examination of the knowledge, skills and abilities necessary for individuals to function in these fields.*

*The objective of this project is to develop a model educational curriculum in fraud and forensic accounting to aid academic institutions, public and private organizations, practitioners, faculty, and prospective students interested in developing professionals with the skills and abilities necessary to excel in these emerging fields.*

The TWG explicitly recognizes that the long-term success of any academic endeavor is derived from three sources: Research, practice, and education. Research drives professional innovation. Practitioners implement the products of research (concepts, ideas, theories, and evidence) by applying, testing, and refining theory and research findings in the field. Finally, educators create learning frameworks through which students benefit from the combined efforts of practice and research. While this document contemplates a model curriculum for education and training, the TWG encourages continued collaboration by all interested stakeholders as exemplified herein.

## **Overview**

As a result of recent, highly publicized financial scandals; reported increases in occupational fraud; and heightened concerns over money laundering to support terrorism and racketeering, legislative mandates and public expectations have heightened the necessity to further define the auditor's and accountant's responsibility for detecting fraud within organizations. Successful fraud or forensic accounting analyses and findings reported by practicing professionals may be the difference between whether perpetrators avoid detection of their illegal activities or they are brought to justice. In most cases, success is directly and primarily dependent upon the knowledge, skills, and abilities of the professionals performing the work. Consequently, the demand for entry-level professionals with formal education in fraud and forensic accounting has grown. Academic institutions and stakeholder organizations that provide education in these fields are faced with a number of questions regarding the nature, extent, and format of a worthwhile curriculum.

West Virginia University, with funding from the National Institute of Justice,<sup>1</sup> organized the TWG to examine fraud and forensic accounting issues and to develop model curriculum guidelines. In addition to assisting academic institutions and faculty in the development and modification of curricula, the guidelines presented are intended to aid professional trainers working in this area and students as they make education and career choices. Further, practicing professionals who seek opportunities to acquire new skills in the area of fraud and forensic accounting may also benefit from this guidance. This report outlines the results of the TWG's efforts.

The TWG process began with the formation of a planning panel consisting of 14 individuals representing various stakeholder groups in the areas of research, practice, and education. The planning panel was charged with defining the scope and boundaries of the project and identifying and recruiting additional members of the TWG. The planning panel recruited an additional 32 individuals representing practitioners from the law enforcement and business communities, professional organizations, regulators and other government agencies, academicians, researchers, and authors.

The TWG intends that the content detailed in this document assist colleges, universities, professors, course developers, and training professionals as follows:

- (1) To select curricula and course content when the desire is to create multiple courses/training modules in the areas of fraud and/or forensic accounting.
- (2) To provide students with an introduction to fraud and/or forensic accounting through a stand-alone exposure course/training module.
- (3) To make modifications to existing auditing, information systems, and other business or accounting course content to provide students and practicing professionals with exposure to fraud and/or forensic accounting.
- (4) To provide curriculum recommendations and outline course content for use by professional development providers, law enforcement trainers, and continuing professional education providers to generate courses, training modules, and materials in the specialized area of fraud and forensic accounting.
- (5) To provide guidance for training and development in the area of fraud and forensic accounting for executives, management, attorneys, board members, audit committee members, and other interested stakeholders.

The TWG identified the following primary content areas for fraud and forensic accounting curricula:

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<sup>1</sup> This project is supported by Award No. 2001-RC-CX-K003 from the National Institute of Justice (NIJ), Office of Justice Programs. The NIJ is the research, development, and evaluation agency of the U.S. Department of Justice. We remain grateful to the NIJ for their financial support.

- (1) Criminology, specifically oriented to the nature, dynamics, and scope of fraud and financial crimes; the legal environment; and ethical issues.
- (2) Fraud prevention, deterrence, detection, investigation, and remediation:<sup>2</sup>
  - a. Asset misappropriation, corruption, and false representations.
  - b. Financial statement fraud.
  - c. Fraud and forensic accounting in a digital environment, including:
    - Computer-based tools and techniques for detection and investigation.
    - Electronic case management tools.
    - Other issues specific to computerized environments.
- (3) Forensic and litigation advisory services, including research and analysis, valuation of losses and damages, dispute investigation, and conflict resolution (including arbitration and mediation).

A review of existing higher education institution offerings indicates that the number of courses available varies from a single class to programs of 4–10 different courses. Programs are offered at the undergraduate and graduate level as majors, minors, tracks, or as nondegree “certificate” programs. Further, job opportunities and the student applicant pool are likely to vary across colleges, universities, and other curriculum providers. Accordingly, the TWG recognized the need for program flexibility. There are various career paths available to students interested in fraud and forensic accounting. Rather than focus on any single career path or curriculum, the guidelines are intended to address the body of knowledge, skills, and abilities common to all, with an emphasis on entry-level competency.

Many students interested in fraud and forensic accounting have or will have a degree in accounting. Others may have degrees in related fields such as criminology, sociology, psychology, law, computer science, or business, or have obtained related job experience with or without accounting skills. To accommodate students with varying backgrounds, the TWG identified basic accounting and auditing knowledge as a prerequisite for the study of fraud and forensic accounting.

## **Motivation**

Recent corporate accounting scandals have led to increased legal and regulatory requirements (e.g., Sarbanes-Oxley Act of 2002, Public Company Accounting Oversight Board (PCAOB)) for improved corporate governance. These requirements address internal controls for detecting and deterring fraud and encourage financial statement auditors to be more aggressive in searching for fraud. This, in turn, has resulted in increased demand for entry-level practitioners and professionals who have greater fraud awareness, as well as knowledge and skills related to fraud and forensic accounting. On a

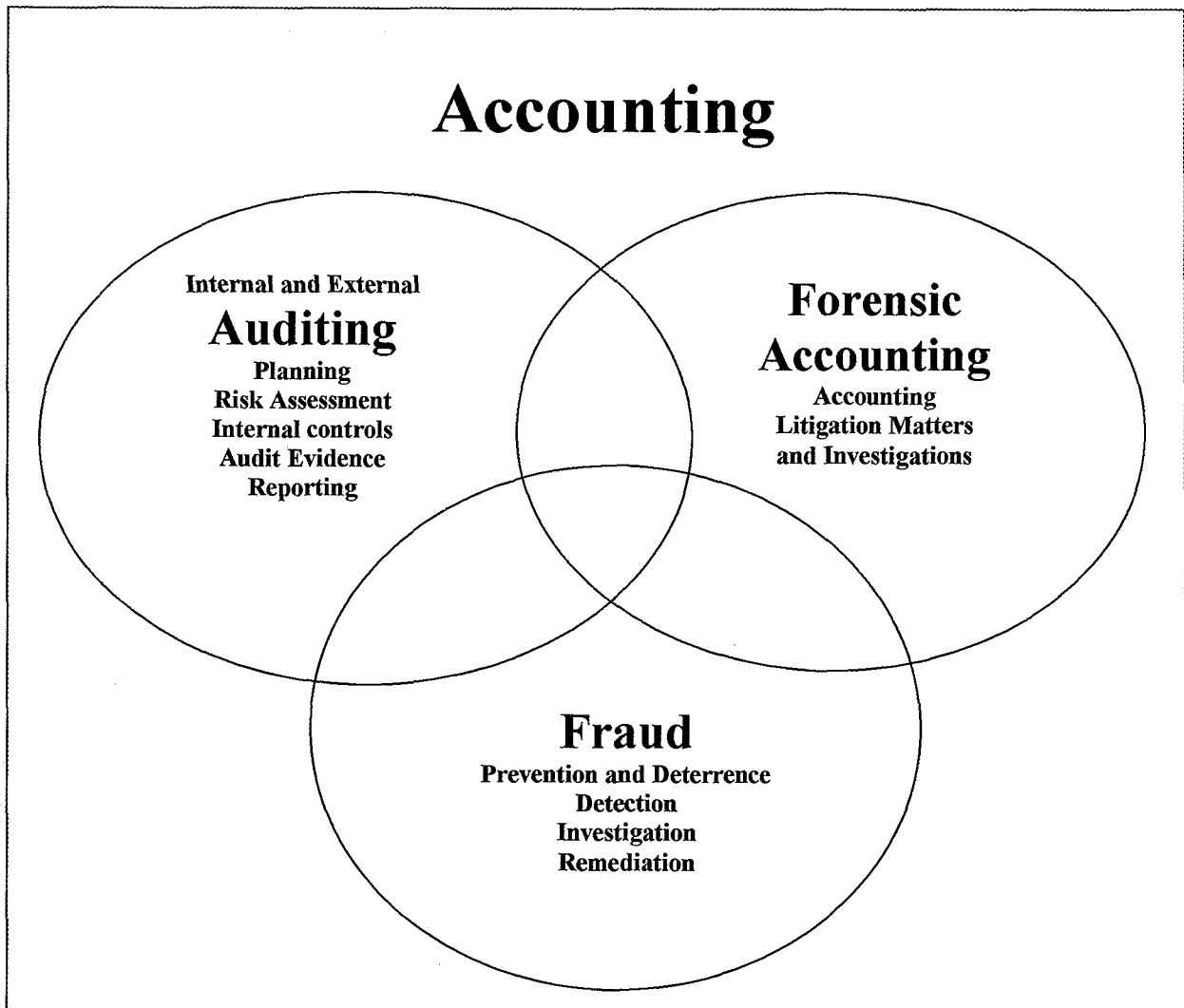
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<sup>2</sup> “Fraud prevention” refers to creating and maintaining environments where fraudulent activities are minimized. Fraud prevention contrasts with “fraud deterrence,” which refers to creating and maintaining environments where fraud is mitigated, subject to cost-benefit constraints. Some practicing professionals argue that fraud prevention implies that, and is only possible if, the root causes of fraud (such as greed, financial pressure, etc.) are eliminated.

more basic level, traditional accounting graduates entering the profession as corporate accountants and internal and external auditors are expected to have a greater understanding of fraud and forensic accounting. Furthermore, as a result of the threat of terror activities and corruption and racketeering, the Department of Justice, the Department of Homeland Security, and law enforcement agencies have placed greater emphasis on white collar crime, money laundering, and terrorist financing (e.g., USA Patriot Act). In addition, there is a growing demand for accountants in forensic and litigation advisory services. Another unfortunate reality is the increasing victimization of individuals targeted in fraud (e.g., identity theft). Raising awareness of fraud prevention measures and assisting in remediation procedures are crucial to effectively addressing this growing problem in society.

As a result of these trends, students and accounting and law enforcement professionals desiring to enter the specialized field of fraud and forensic accounting, as well as employers hiring entry-level professionals, have urged academic institutions to enhance their fraud and forensic accounting course offerings and programs. In turn, academic institutions and professional training providers need to better understand the knowledge and skills required to enter this specialized field.

The graphic below articulates how the knowledge and skills of traditional accounting, auditing, fraud, and forensic accounting interrelate. Traditional auditing procedures address fraud to the extent that AICPA Statement on Auditing Standards (SAS) No. 99 and other auditing requirements necessitate a search for fraud; however, auditors have no responsibility to plan and perform auditing procedures to detect misstatements that are not judged to be material (including those caused by error as well as fraud). Corporate management also has increased responsibility to design and implement internal controls to prevent and detect fraud as a result of Sarbanes-Oxley. Allegations of fraud are often resolved through court action that may include calculated estimates of losses (damages), suggesting that fraud investigation and forensic accounting often overlap. However, both encompass activities unrelated to the other: fraud professionals often assist in fraud prevention and deterrence efforts that do not directly interface with the legal system, and forensic accountants work with damage claims, valuations, and legal issues that do not involve allegations of fraud.



The interrelationship among auditing, fraud, and forensic accounting is dynamic, changing over time due to political, social, and cultural events. In addition, the level of overlap between forensic accounting and fraud may be larger than depicted here. Because external auditors operate in an environment impacted by AICPA SAS No. 99 and the Sarbanes-Oxley Act, they are expected to have, at a minimum, adequate knowledge and skills in the area of fraud and forensic accounting. In addition, auditing, fraud, and forensic accounting professionals often have skill sets in multiple areas and are able to leverage their skills and abilities from one area when working in others.

As such, this report identifies fraud and forensic accounting curriculum choices and provides guidelines for interested colleges, universities, and other curriculum providers in three areas: (1) Those who wish to add multiple courses/training modules that allow prospective students to prepare for entry-level positions in the field of fraud and forensic accounting, (2) those who wish to add a single survey course/training module, and (3) those who wish to enhance current course content/training efforts by including increased coverage of fraud and forensic accounting topics. The curriculum recommendations and course content outlined in this document may also be used to generate courses, training

modules, and materials for professional development programs, law enforcement training, and continuing professional education and to provide guidance for training and development for executives, management, attorneys, board members, audit committee members, and other interested stakeholders. The guidelines outlined below will assist curriculum developers in identifying topical coverage and evaluating the course content that would be most appropriate for their students.

## **Model Curriculum Working Definitions**

In order to develop fraud and forensic accounting curriculum guidelines, the TWG started with the following definitions:

**Forensic accounting** is the application of accounting principles, theories, and disciplines to facts or hypotheses at issue in a legal dispute, and encompasses every branch of accounting knowledge.

Forensic accounting consists of two major components: (1) Litigation services that recognize the role of the CPA as an expert or consultant and (2) investigative services that make use of the CPA's skills, which may or may not lead to courtroom testimony. Forensic accounting may involve the application of special skills in accounting, auditing, finance, quantitative methods, certain areas of the law and research, and investigative skills to collect, analyze, and evaluate evidential matter and to interpret and communicate findings. Forensic accounting may involve either an attest or consulting engagement.<sup>3</sup>

**Fraud** and fraud-related definitions:

**Fraud** (sometimes referred to as the **fraudulent act**) is "an intentional perversion of truth for the purpose of inducing another in reliance upon it to part with some valuable thing or to surrender a legal right; a false representation of a matter of fact."<sup>4</sup>

**Fraud examination** is a methodology for resolving fraud allegations from inception to disposition, including obtaining evidence, interviewing, writing reports and testifying. Fraud Examiners, as designated by the ACFE, also assist in fraud prevention, deterrence, detection, investigation and remediation.<sup>5</sup>

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<sup>3</sup> The AICPA Forensic and Litigation Services Committee developed the definition. See also Crumbley, D. Larry, Lester E. Heitger, and G. Stevenson Smith, *Forensic and Investigative Accounting*, Chicago: CCH Incorporated, 2005.

<sup>4</sup> Black, Henry Campbell, *Black's Law Dictionary, Sixth ed.*, St. Paul: West Publishing Co., 1990.

<sup>5</sup> Adapted from Association of Certified Fraud Examiners, *Fraud Examiners Manual*, Austin: Association of Certified Fraud Examiners, 2005.

**Fraud investigation** takes place when indicators of fraud, such as missing cash or other evidence, suggest that a fraudulent act has occurred and requires investigation to determine the extent of the losses and the identity of the perpetrator.<sup>6</sup>

**Fraud prevention** refers to creating and maintaining environments where the risk of a particular fraudulent activity is minimal and opportunity is eliminated, given the inherent cost-benefit tradeoff. When fraud is prevented, potential victims avoid the costs associated with detection and investigation.<sup>7</sup>

**Fraud deterrence** refers to creating environments in which people are discouraged from committing fraud, although it is still possible. The 2005 Federal Sentencing Guideline Manual defines deterrence as a clear message sent to society that repeated criminal behavior will aggravate the need for punishment with each recurrence. Deterrence is usually accomplished through a variety of efforts associated with internal controls and ethics programs that create a workplace of integrity and encourage employees to report potential wrongdoing. Such actions increase the perceived likelihood that an act of fraud will be detected and reported. Fraud deterrence can also be achieved through the use of continuous monitoring/auditing software tools. Fraud deterrence is enhanced when the perception of detection is present and potential perpetrators recognize that they will be punished when caught.

**Fraud detection** refers to the process of discovering the presence or existence of fraud. Fraud detection can be accomplished through the use of well designed internal controls, supervision and monitoring and the active search for evidence of potential fraud.

**Fraud remediation** refers to (1) the recovery of losses through insurance, the legal system or other means and (2) the modification of operational processes and procedures, including changes to the system of internal control deemed necessary to minimize or deter a recurrence of similar fraud in the future.

The **fraud scheme** is the specific methodology used to commit, conceal and benefit from the fraudulent act. To understand the

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<sup>6</sup> Whether to use the term “fraud investigation” or “fraud examination” is a matter of debate among practitioners. Some, including the Association of Certified Fraud Examiners, prefer the term fraud examination because it encompasses prevention, deterrence, detection, and remediation elements in addition to investigation. Others prefer fraud investigation because the term examination has a special meaning for auditors and accountants. The TWG’s position is that either term is acceptable as long as the full term, including the word “fraud,” is used: fraud examination or fraud investigation.

<sup>7</sup> Albrecht, W. Steve, and Chad O. Albrecht, *Fraud Examination & Prevention*, Mason, OH: Thomson South-Western, 2003.



fraud scheme, investigators often chart operational processes to identify internal control points and possible internal control breakdowns to determine the means by which the fraud act was perpetrated. By studying the scheme, investigators can identify possible perpetrators and can assist with the remediation process.

### **Student Placement as a Model Curriculum Driver**

The TWG concluded that anticipated career paths and the student applicant pool would likely drive the curriculum choices made by interested colleges and universities. Figure 1 below captures several anticipated career paths.

Based on the applicant pool, colleges, universities, and professional educators and trainers will determine the appropriate prerequisites. Once students are admitted, institutions will then be tasked with developing students' knowledge and skills to the point that they qualify to enter the field of fraud and forensic accounting. Identified career paths include positions at professional services firms, corporations, government or regulatory agencies, law enforcement agencies, and legal services organizations. Opportunities for fraud and forensic accounting professionals in professional services firms include external auditing, internal audit outsourcing, and forensic and litigation advisory services.

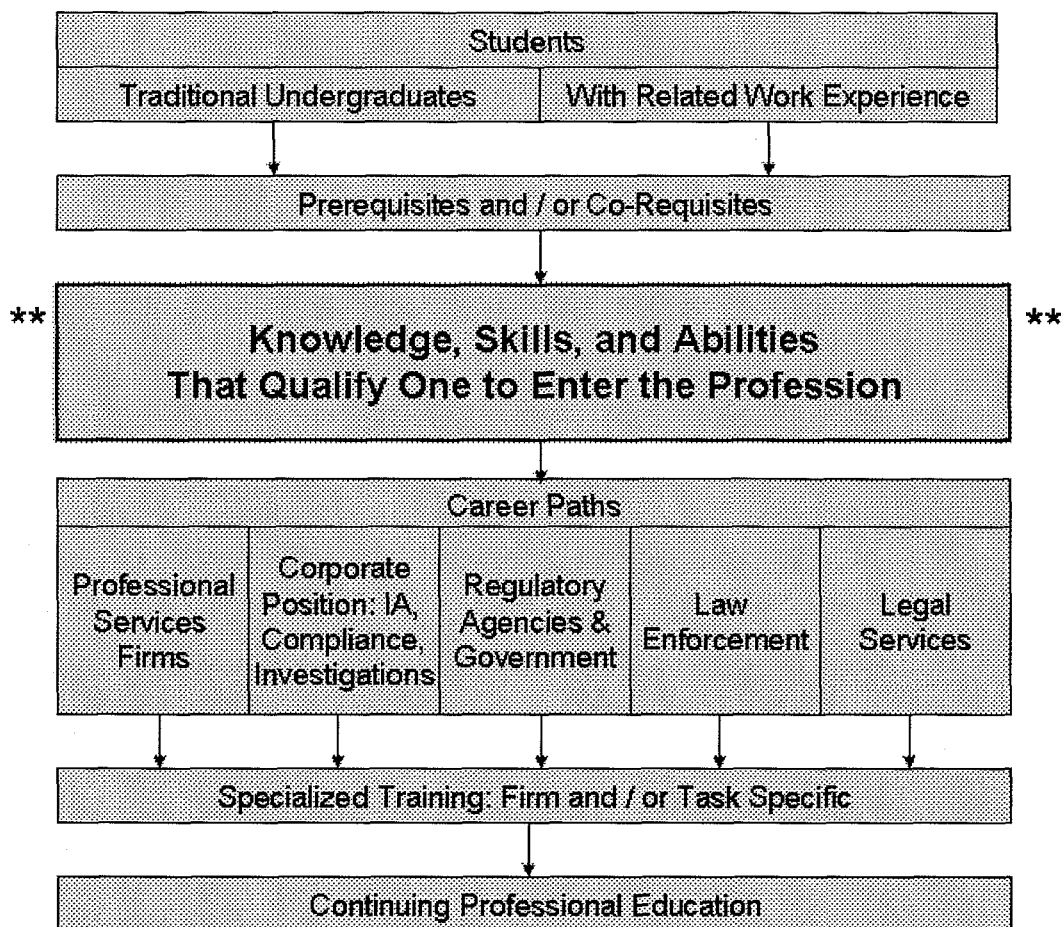


Figure 1

Finally, to become a long-term, successful professional requires additional specialized training and continuing professional development. Specialized training for entry-level staff helps them achieve the required level of competency within a specific organization. Some of the specialized training will be organization-specific, while other training will be task-specific. Further, experienced staff persons require continuing professional education to maintain proficiency.

The goal of the TWG is to focus on identifying the knowledge and skills necessary to enter the field of fraud and forensic accounting. Thus, its recommendations are oriented around the center blocks of figure 1: knowledge, skills, and abilities; and entry-level career paths. In an applied discipline like accounting, student placement and job

opportunities are usually viewed as key performance indicators. Therefore, to begin the process of curriculum development, consideration should be given to potential employers and what they require of their entry-level employees.

### **Demand for entry-level fraud and forensic accounting students**

The demand for accounting students who have specialized qualifications in fraud and forensic accounting has grown significantly and is likely to continue to grow, creating an opportunity for those colleges, universities, and other course developers that choose to provide related courses and programs. For example, The Wall Street Journal stated that “forensic accounting is a particularly hot field” (“CPA Recruitment Intensifies as Accounting Rules Evolve,” March 22, 2005).<sup>8</sup> Moreover, each of the Big 4 firms is now recruiting accounting students with some exposure to forensic accounting. Further examples include the need for staffing at the SEC, PCAOB, and in private industry in response to the Sarbanes-Oxley Act.

### **Building Knowledge, Skills and Abilities in Fraud and Forensic Accounting**

The progression of knowledge, skills and abilities for fraud and forensic accounting for entry-level professionals is presented in figure 2. The first two columns address prerequisite accounting, auditing and business law knowledge that is considered necessary for the fraud and forensic accounting curriculum. Students with an accounting degree will have met these prerequisites as part of their degree requirements. Students who do not have an accounting degree will need to obtain the prerequisite knowledge and skills before embarking on the fraud and forensic accounting curriculum.

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<sup>8</sup> See also:

Berry, Kate, “Business Booming for Forensic Accountants.” *Los Angeles Business Journal*, June 6, 2005, [http://findarticles.com/p/articles/mi\\_m5072/is\\_23\\_27/ai\\_n13826614](http://findarticles.com/p/articles/mi_m5072/is_23_27/ai_n13826614).

Martin, Neil A., “Super Sleuths.” *Barron’s Online*, February 28, 2005 (subscribers only).

Anderson, Mark, “Accountants Rock.” *Sacramento Business Journal*, July 29, 2005, [www.bizjournals.com/sacramento/stories/2005/08/01/focus1.html](http://www.bizjournals.com/sacramento/stories/2005/08/01/focus1.html).

Figure 2				
Prerequisite Knowledge		Exposure Material/Course	In-Depth Course Material	
(1) Commonly Included in Undergraduate Accounting Curriculum	(2) Commonly Included in Business Core or Electives	(3) Core Fraud and Forensic Accounting	(4) Fraud	(5) Forensic Accounting
<p>Basic accounting:</p> <ul style="list-style-type: none"> <li>• Basic financial statements and note disclosures.</li> <li>• The effects of debits and credits on account balances.</li> <li>• Account analysis.</li> <li>• Computation of key financial ratios, common size financials, etc.</li> </ul> <p>Basic auditing concepts:</p> <ul style="list-style-type: none"> <li>• Professional skepticism.</li> <li>• Relevant auditing standards.</li> <li>• Professional and regulatory bodies.</li> <li>• Types of audit evidence.</li> </ul> <p>Basics of transaction processing cycles and internal controls, including computer-based information system controls</p> <p>Basics of business law</p> <p>Basic Computer Skills</p>	<p>General business communication skills (oral and written)</p> <p>Business ethics</p>	<p>Definition of fraud</p> <p>Definition of forensic accounting</p> <p>Basic discussion of the roles of auditors, fraud professionals, and forensic accountants</p> <p>Overview of who commits fraud and why, and the fraud triangle:</p> <ul style="list-style-type: none"> <li>• Pressure.</li> <li>• Opportunity.</li> <li>• Rationalization.</li> </ul> <p>Overview of the elements of fraud:</p> <ul style="list-style-type: none"> <li>• Act.</li> <li>• Concealment.</li> <li>• Conversion.</li> </ul> <p>Discussion of fraud prevention, deterrence, detection, investigation, and remediation</p> <p>Overview of common fraud acts, including asset misappropriations and fraudulent financial reporting</p> <p>Discussion of "red flags"</p> <p>Discussion of fraud remediation: criminal and civil litigation, and internal controls</p> <p>Discussion of types of forensic and litigation advisory engagements</p>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Criminology; Legal, Regulatory, and Professional Environment; Ethical Issues</p> </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Fraud and Forensic Accounting: Asset Misappropriations, Corruption, and False Representations Financial Statement Fraud Fraud and Forensic Accounting in a Digital Environment</p> </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Forensic and Litigation Advisory Services</p> </div>	

## **Prerequisite knowledge and skills**

The knowledge and skills students should have when they concentrate on issues associated with fraud and forensic accounting include the following:<sup>9</sup>

### *Basic accounting concepts*

- Key concepts of accounting such as the definitions of assets, liabilities, stockholders' equity, revenue and expenses, revenue recognition, expense measurement, reliability, objectivity, verifiability, materiality, accruals, deferrals, etc.
- Basic financial statement presentation and appropriate disclosure.
- The effects of debits and credits on account balances. This understanding is essential in identifying fraud schemes and financial statement manipulation. Students need to be able to analyze accounts (i.e., recognize a normal balance for each type of account and ascertain how a given transaction would affect each account balance) and determine whether each component has been examined directly or indirectly for understatement and overstatement.
- Account balance analysis for both over- and understatement.
- Basic ratio analysis. Students need to be able to calculate ratios and interpret the results, such as identifying trends across time and unusual variances in comparison to key industry ratios and other benchmarks (skills normally covered in entry-level accounting courses).

### *Basic auditing concepts*

- The basic elements of auditing, including professional skepticism in evaluating statements or representations made.
- Different types and quality of audit evidentiary matter and how to evaluate types of evidence (definitive, circumstantial, direct, corroborative, and conflicting).
- Relevant current accounting and auditing standards and the roles and responsibilities of standard-setting, professional, and regulatory bodies.
- Organization and development of working papers.

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<sup>9</sup> University students who develop an early interest in fraud and forensic accounting may also want to take criminology and risk management courses to the extent such courses are available and fit into their course of study.

### *Transaction processing cycles and control environment*

- Internal control concepts and an ability to recognize potential weaknesses in a company's internal control structure.
- Corporate governance and culture (e.g., "tone at the top"), including ethics and entity-level controls.
- Operational processes and transaction flows within an organization and tracing transactions (cash and noncash) from source documents to initial entry in the accounting system through the various subledgers and ledgers to reported financial statements. The documentation of processes and transaction flows includes both manual activities and those that incorporate automated information systems.

### *Business law concepts*

- The fundamental legal principles associated with contracts, civil and criminal matters, social goals associated with the legal system, and the role of the justice system.
- Securities and other laws that demonstrate how fraud and fraudulent financial reporting violate the law and how the regulatory, professional, civil, and law enforcement systems operates to prevent, detect, and deter violations.
- Ethical duties and legal responsibilities associated with confidentiality.

### *General business communications skills and business ethics*

Communications: The second column in figure 2 identifies two courses that are often included as business core courses or business electives: General communications and business ethics. These courses are not listed as prerequisites, but are highly recommended. Fraud and forensic accounting professionals must have strong written and oral presentation skills. Therefore, a general communications course is extremely beneficial. Students without formal training in oral and written communication may wish to complete such a course before entering a fraud and forensic accounting program.

Ethics: Many states specify a business ethics course as a requirement to sit for the CPA exam. Accounting majors in such states are likely to have completed a business ethics course as part of their degree requirements. Because ethics is such an important part of the fraud and forensic

accounting curriculum, students who have the opportunity to take a business ethics course are advised to do so.

### *Basic Computer Skills*

Familiarity with computers, computer operations and general business software packages such as Word, WordPerfect, Excel, Quattro, and PowerPoint.

### **Exposure material/course**

Column 3 of figure 2 shows the exposure to fraud and forensic accounting topics that may be covered in an undergraduate or graduate accounting curriculum. Colleges, universities, and other curriculum providers may use this outline of topical areas as a guide to provide exposure to students by incorporating coverage in current offerings or may add a single course/training module. Some of these topics are covered briefly, for example, as one chapter in the auditing text and/or one chapter in the accounting systems text. Because the coverage of these topics in traditional texts is relatively minimal, they should be reinforced and explored in greater depth as part of the fraud and forensic accounting curriculum. For additional guidance, readers should consider the content presented in table 2, Core Foundation for Fraud and Forensic Accounting and in table 6, Forensic and Litigation Advisory Services.

### **In-depth course material**

Columns 4 and 5 of figure 2 provide an overview of the model curriculum areas required for in-depth study. Entry-level fraud and forensic accounting professionals should possess knowledge, skills, and abilities in the following areas:

(1) Criminology; the Legal, Regulatory, and Professional Environment; and Ethics

- Criminology is the societal (sociological) study of crime. The criminology material should focus on white collar criminals.
- The legal, regulatory, and professional environment includes Federal, State, and local criminal and regulatory laws and professional responsibilities in criminal and civil matters. Note: Although the model curriculum is designed to be used to investigate fraud internationally, instructors need to be cognizant of the legal environment in which their students will work to ensure students are appropriately prepared for national and international engagements.
- Ethics is the branch of philosophy dealing with values relating to human conduct, with respect to rightness and wrongness of actions and the goodness and badness of motives and ends.

## (2) Fraud and Forensic Accounting

- Asset Misappropriation, Corruption, False Representations and Other Frauds.
  - Asset misappropriation is the theft or misuse of an entity's assets (Wells, Joseph T., *Principles of Fraud Examination*, Hoboken, NJ: John Wiley & Sons, 2005).
  - Corruption involves "paying off" officials, both public and private, for preferential treatment. Corruption breaks down into four types: (a) Bribery, (b) conflicts of interest, (c) extortion and (d) illegal gratuities (Albrecht, W. Steve, and Chad O. Albrecht, *Fraud Examination & Prevention*, Mason, OH: Thomson South-Western, 2003).
  - False representations involve making untrue statements (e.g., fraudulent tax returns, bankruptcy filings, employment applications).
- Financial Statement Fraud.
  - The deliberate misrepresentation of the financial condition and results of operations of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements to deceive financial statement users<sup>10</sup> (Association of Certified Fraud Examiners, *Fraud Examiners Manual*, Mason, OH: Thomson South-Western, 2005).
- Fraud and Forensic Accounting in a Digital Environment.
  - The use of computer software to aid in the prevention, deterrence, detection and investigation of fraud and other white-collar crimes. Topics include: the use of generalized audit software for data extraction and analysis; the use of spreadsheet, database and specialized software for fraud detection and analysis; and the use of the Internet and other investigative tools such as public records search, data mining, continuous monitoring and auditing software and link analysis software.

## (3) Forensic and Litigation Advisory Services

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<sup>10</sup> Occupational fraud and corruption may lead to fraudulent financial statements if the financial statements are materially misstated.



- Forensic and litigation advisory services include accountants' use of their knowledge, skills, abilities, experience, training, and education to support legal actions. Such activities normally are carried out by fraud and forensic accounting professionals acting as consultants and expert witnesses.<sup>11</sup> While fraud and forensic accounting professionals may provide forensic and litigation advisory services in criminal cases, the majority of this work is in the area of civil litigation. Engagements include the investigation of damage claims, economic damages related to work-place issues, matrimonial investigations, and assets and business valuations.<sup>12</sup>

### **The Model Curriculum Overview**

Figure 3 provides an overview of the curriculum. This figure expands on the concepts outlined in columns 4 and 5 from table 1 above.

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<sup>11</sup> An expert witness is an individual who, because of specialized training or experience, is allowed to testify in court to help the judge or jurors understand complicated and technical subjects. Unlike expert witnesses, nonexpert witnesses generally may not offer opinions. In some cases, accountants may be retained as consultants to gather and interpret facts, prepare analyses, help the attorney interpret evidence, and advise about issues and strategies in legal matters. While expert witnesses can expect their work to be made available to other parties to the litigation, a consultant's work is usually protected by the attorney work product privilege. See Crumbley et al., *Forensic and Investigative Accounting* (note 3).

<sup>12</sup> Adapted from Crumbley et al., *Forensic and Investigative Accounting* (see note 3).

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**Figure 3**  
**Model Curriculum Overview**

**1. Criminology; Legal, Regulatory, and Professional Environment; Ethical Issues**

**2. Fraud and Forensic Accounting**

**Core Foundation for Fraud and Forensic Accounting**

Definitions of Fraud and Forensic Accounting

Professional Roles: Auditors, Fraud Professionals, and Forensic Accountants

Basic Concepts of Fraud

The Antifraud Mindset

Forensic Accounting Engagements

**Asset Misappropriation, Corruption, and False Representations**

Prevention and Deterrence

Fraud Detection: Risk Assessment, Testing of and Reliance on Internal Controls, and Proactive Auditing Procedures

Fraud Investigation Methods and the Organization and Evaluation of Evidence

Reporting

Remediation

**Financial Statements**

Financial Accounting and Auditing

Prevention and Deterrence

Fraud Detection: Risk Assessment, Testing of and Reliance on Internal Controls, and Proactive Auditing Procedures

Fraud Investigation Methods and the Organization and Evaluation of Evidence

Reporting

Remediation

Special Legal and Regulatory Issues

**Fraud and Forensic Accounting in a Digital Environment**

Prevention and Deterrence

Digital Evidence

Detection and Investigation

Reporting

Cybercrime

**3. Forensic and Litigation Advisory Services**

Definition of Forensic and Litigation Services

Overview of Services

Research and Analysis

Damages

Valuations

Working Papers

Reporting

## **Details of the model curriculum**

The remainder of this document discusses in greater detail the model curriculum for fraud and forensic accounting. The knowledge and skills are presented in a separate table for each content area. Each table has two columns: “What students should know” and “What students should be able to do.”

The first column in each table, “What students should know,” addresses the recommended declarative and procedural knowledge. Declarative knowledge includes definitions and facts. Procedural knowledge is about knowing “how” to do a task, with a focus on learning the steps involved in a process or task.

The second column in each table, “What students should be able to do,” addresses the recommended skills and abilities. Skills focus on the students’ ability to use knowledge to perform a task. To acquire skills, the student must be actively engaged in solving problems, completing exercises, and analyzing case material. A single integrative case or professional experience (e.g., internship) can hone many of the recommended skills.

The curriculum guidelines identify the knowledge and skills necessary to enter the fraud and forensic accounting specialization. Although the curriculum guidelines are presented in six separate tables, this does not imply that six separate courses are required. Academic institutions and training providers may choose to package their course content in a number of ways. For example, the material listed under the caption Fraud and Forensic Accounting in a Digital Environment may be taught in a separate course or integrated with the material on Financial Statement Fraud and Asset Misappropriation, Corruption, False Representations, and Other Fraudulent Acts.

## **Resources for Curriculum Developers**

The TWG does not endorse or make any specific recommendations of course materials, textbooks, or other materials. However, the TWG feels strongly that the usefulness of this document will be enhanced with the listing of resources. Appendix A of this document includes a list of the primary resources identified and used as reference material by the TWG in the creation of this document, including textbooks and instruction materials, academic journals devoted to fraud and forensic accounting, sources of case materials, and applicable organizations. This listing is not intended to be a complete list of all resources available. Further, in the creation of these guidelines, the TWG made great effort to utilize terms and concepts that can be commonly found in these resources.

## Model Curriculum for Criminology, Legal Environment, and Ethics

Criminology is the sociological study of crime and criminals. Understanding the nature, dynamics and scope of fraud and financial crimes is an important aspect of an entry-level professional's knowledge base. Suggested course material includes theories of crime causation and the application of theory to instances of white-collar crime.

With respect to the legal environment, proposed coverage includes a comparison of criminal and civil courts, the law as it applies to fraud, the rights of individuals under investigation, and rules of evidence.

Fraud and forensic accounting professionals must have an ethical framework for appropriate decisionmaking. This requires some coverage of theories of business ethics and an applicable personal code of ethics so that those entering this specialized area are clearly informed and understand ethical expectations. Further, prospective students should be notified that inappropriate prior behavior, such as past criminal convictions, may exclude them from entry into the profession. Students should also understand what protections exist for whistleblowers.

Knowledge of business law is a presumed precursor to studying the legal environment in the specialized area of fraud and forensic accounting. Traditional courses in business law should be sufficient to achieve this level of understanding.

**Table 1**  
**Criminology, Legal Environment, and Ethics**

What students should know	What students should be able to do
<i>Criminology</i>	
Knowledge of the theories of crime causation, focusing on who commits fraud and why. Fraudsters look "exactly like us" and the majority are first-time offenders. As such, investigation into theories of crime causation should not focus on street crime but should be tailored to perpetrators of fraud. <sup>13</sup>	Compare and contrast various theories of crime causation (e.g., Sutherland, Cressey, and Albrecht)
An understanding of the nature, dynamics, and scope of fraud and financial crimes.	Apply crime causation theory to fact patterns and evidential material: <ol style="list-style-type: none"> <li>1. As a basis for identifying when an investigation may be necessary.</li> <li>2. As a basis for planning and completing investigations.</li> <li>3. Toward a goal of fraud prevention and deterrence.</li> </ol>

<sup>13</sup> See Albrecht and Albrecht, *Fraud Examination & Prevention* (note7) and ACFE, *Fraud Examiners Manual* (note 5). Fraud statistics can be found in ACFE, *2004 Report to the Nation on Occupational Fraud and Abuse*, [www.acfe.com/fraud/report.asp](http://www.acfe.com/fraud/report.asp).

<p>An understanding of the impact of criminal behavior, motivation and other attributes on interviewing and interrogations.</p>	<p>Describe and execute appropriate techniques necessary to conduct effective interviews and interrogations; interpret behavioral and other environmental indications of fraud.</p>
<p><b><i>Legal, Regulatory, and Professional Environment</i></b><sup>14</sup></p>	
<p>An overview understanding of the civil, criminal, and regulatory systems.</p>	
<p>An understanding of the criminal justice system at the Federal and applicable State levels including:</p> <ol style="list-style-type: none"> <li>1. An emphasis on the law as it relates to fraud, as it applies to individuals and corporations, with a particular focus on criminal intent and willfulness.<sup>15</sup></li> <li>2. The rights of business entities and individuals.</li> <li>3. Criminal procedure.</li> </ol> <p>An understanding of the civil litigation environment:</p> <ol style="list-style-type: none"> <li>1. The law as it applies to torts and breach of contract.</li> <li>2. The civil litigation process.</li> </ol>	<p>Analyze and discuss the impact of the legal and regulatory environment on perpetrators, witnesses, organizations, and fraud and forensic accounting professionals, given particular fact patterns and case examples.</p>
<p>An understanding of the regulatory system and Acts such as SEC, PCAOB, Sarbanes-Oxley, IRS, etc., especially concerning fraud prevention and deterrence and an auditor's responsibility for detecting fraud.</p>	<p>Apply components of the various regulatory requirements in specific case scenarios. As an example, students should be able to act as an auditor and evaluate a public company's internal control over financial reporting.</p>
<p>An understanding of the standards of conduct for performing litigation-type services:<sup>16</sup></p> <ol style="list-style-type: none"> <li>1. Knowledge, skills, experience, training and education</li> <li>2. Adherence to professional codes of conduct</li> <li>3. Consideration of conflicts of interest</li> <li>4. Written engagement letters<sup>17</sup></li> <li>5. Background considerations (e.g., a criminal history)</li> <li>6. The Frye and Daubert Standards</li> <li>7. Differences between opinions and factual testimony</li> </ol>	<p>Identify standards of conduct, given particular case scenarios and fact patterns that are necessary to ensure investigations can be completed competently and in compliance with applicable standards</p>

<sup>14</sup> While the model curriculum is designed to be used to investigate fraud internationally, instructors need to be cognizant of the legal environment in which their students will work to ensure students are appropriately prepared for national and international engagements.

<sup>15</sup> Like individuals, corporations can be prosecuted for illegal acts. See U.S. Department of Justice, Office of the Deputy Attorney General, Memorandum, "Principles of Federal Prosecution of Business Organizations," January 20, 2003, [www.usdoj.gov/dag/cftf/corporate\\_guidelines.htm](http://www.usdoj.gov/dag/cftf/corporate_guidelines.htm).

<sup>16</sup> Adapted from Crumbley et al., *Forensic and Investigative Accounting* (see note 3).

<sup>17</sup> See AICPA Engagement Letters for Litigation Services - Business Valuation and Fraud and Litigation Services Practice Aid 04-1

<p>An understanding of the discovery process, attorney-client privilege and attorney work product, privacy and rules of evidence</p>	<p>Identify legal restrictions, privacy laws and rights of individuals on gathering and presenting evidence</p>
<p>An understanding of the importance and impact of effective corporate governance mechanisms including:</p> <ol style="list-style-type: none"> <li>1. Organizational code of conduct supported by an embedded culture of honesty and ethical behavior.</li> <li>2. An independent and empowered board of directors.</li> <li>3. An independent and empowered audit committee.</li> <li>4. Organizational policies and reward systems that are consistent with espoused ethical values.</li> <li>5. Confidential disclosure methods.</li> <li>6. Effective legal risk assessment.</li> </ol>	<p>Analyze the role of corporate governance mechanisms in fraud prevention and identify corporate governance breakdowns in the facilitation of historical fraudulent acts.</p>
<p>Knowledge of legal remedies:</p> <ol style="list-style-type: none"> <li>1. Criminal – punishment and civil remedies for fraud and financial crimes.<sup>18</sup></li> <li>2. Civil – various remedies resulting from civil litigation.</li> <li>3. Other negotiated remedies (e.g., arbitration, mediation, restitution, termination).</li> <li>4. The choice of taking no action.</li> </ol>	<p>Identify and evaluate alternative legal remedies, determine the impact of alternatives on investigations, and identify ways that a fraud and forensic accounting professional could assist organizations and the legal community in pursuing appropriate remedies</p>

<sup>18</sup> See also U.S. Department of Justice, Office of Attorney General, “Principles of Federal Prosecution of Business Organizations” (note 15).

<p>Familiarity with the following sources of information and guidance for fraud and forensic accounting:<sup>19</sup></p> <ol style="list-style-type: none"> <li>1. AICPA SAS No. 99.</li> <li>2. COSO's Enterprise Risk Management Framework.</li> <li>3. International Auditing and Assurance Standards Board ISA 240.<sup>20</sup></li> <li>4. Sarbanes-Oxley Act.</li> <li>5. Federal Sentencing Guidelines.</li> <li>6. Foreign Corrupt Practices Act.</li> <li>7. PCAOB's AS-2 and AS-3.</li> <li>8. IIA Practice Advisories 1210.A2-1 and 1210.A2-2.</li> <li>9. Federal Rules of Evidence.</li> <li>10. SEC Staff Accounting Bulletin (SAB) No. 99.</li> </ol>	<p>Identify applicable standards, given fact patterns or case scenarios, and know how the standards impact issues such as professional responsibility, appropriate investigative response, and the possibility of culpability of associated professionals.</p>
<p><b><i>Ethical Issues</i></b><sup>21</sup></p>	
<p>Knowledge of alternative theories of business ethics and an understanding of the role of ethics in the context of corporate governance and the inappropriate (unethical and possibly illegal) use of corporate assets by management and employees.</p>	<p>Identify ethical issues, conflicts of interest, and noncompliance with corporate policies and procedures in the context of a specific case. Note: Conflicts of interest routinely arise in the business world; such conflicts rise to the level of impropriety when disclosure is inadequate and the effects of conflicts cannot be evaluated and mitigated.</p>
<p>Examination of personal and various professional codes of ethics.</p>	<p>Apply critical analytical skills in choosing among alternative courses of action in various aspects of fraud and forensic accounting within the framework of appropriate moral conduct.</p>

<sup>19</sup> Academics and professional trainers need to be aware that the legal, regulatory, and professional environment is dynamic. As examples, the AICPA has an exposure draft on "Standards for Valuation Services"; the AICPA Professional Ethics Executive Committee has proposed Interpretation 101-17, "Performance of Client Advocacy Services, Fact Witness Testimony, and Forensic Accounting Services, Under Rule 101, Independence"; and the AICPA has issued a Special Report entitled "AICPA Consulting Services Special Report 03-1—Litigation Services and Applicable Professional Standards."

<sup>20</sup> "The Auditor's Responsibility to Consider Fraud and Error in an Audit of Financial Statements."

<sup>21</sup> Ethics should be considered pervasive, a common thread, and included in all aspects of the fraud and forensic accounting curricula.

## Model Curriculum for Fraud and Forensic Accounting

Desired student outcomes, student placement opportunities, and employer needs will determine the relative coverage of the subject areas; but generally, with regard to fraud and forensic accounting, there is a core foundation of knowledge, skills, and abilities that is necessary. Classroom instruction should incorporate clear examples of fraud and forensic accounting engagements and include examination of theories and case studies. Students need to be able to recognize the patterns and circumstances surrounding fraud and forensic accounting matters.

Related to fraud, students should know and understand the basic fraud triangle: opportunity, pressure, and rationalization. In addition, students need to understand the key elements of fraud (act, concealment, and conversion), its symptoms, and the red flags that may indicate fraud. Further, students should understand how to avoid becoming a fraud victim (e.g., identity theft), identify a course of action to prevent becoming a victim, and when victimized, know how to help remediate the situation.

Tables 3, 4, 5, and 6 build upon the core foundation outlined in table 2.

<b>Table 2</b>	
<b>Core Foundation for Fraud and Forensic Accounting</b>	
<b>Note to instructors:</b>	
The guidance in this section can be used as an introduction to fraud and forensic accounting. Armed with the knowledge, skills, and abilities outlined in this section, students may not have the ability to investigate fraud or provide forensic and litigation advisory services, but they should know enough to recognize when to call for specialized assistance.	
<b>What students should know</b>	<b>What students should be able to do</b>
<b><i>The definition of fraud</i></b>	
Understand that fraud is theft by deception. (See definition of fraud from Black's Law Dictionary in Model Curriculum Working Definitions section of this document.)	Examine a fact pattern or scenario to identify a potentially fraudulent situation.
<b><i>The definition of forensic accounting</i></b>	
Forensic accounting is the application of accounting to legal matters and includes investigation and litigation services. (See the more formal definition in Model Curriculum Working Definitions section of this document.)	Examine a fact pattern or scenario related to economic damages, an employment dispute, marital assets, a business valuation, or other investigation (e.g., occupational fraud) to identify the best approach to service the client.
<b><i>Professional Roles</i></b>	
Understand differences between financial statement auditors, anti-fraud professionals, and forensic accounting professionals.	Identify skills set and be able to determine when to obtain the assistance of professionals with appropriate levels of expertise.



<b><i>Basic concepts of fraud</i></b>	
Understand who commits fraud and why, by using fraud statistics <sup>22</sup> and the fraud triangle—opportunity, pressure, and rationalization. <sup>23</sup>	Identify the three components of the fraud triangle in the context of a particular fact pattern or case scenario.
Know the elements of fraud: act, concealment, and conversion. <sup>24</sup>	Identify the three elements of fraud based on a fact pattern or fraud scenario.
High-level, general knowledge of various fraud acts. (See fraudulent acts outlined in appendix B of this document or Wells, Joseph T., <i>Occupational Fraud and Abuse</i> , Austin: Obsidian Publishing, 1997, Flow-Chart 1.1.)	Identify various fraud acts based on fact patterns, likelihood of occurrence (through the use of fraud statistics when applicable), and significance of potential losses.
<p>Understand the basic concept of “red flags” (fraud risk factors), anomalous relationships, events, conditions, or symptoms that indicate an increased probability of fraud. Red flags include:</p> <ol style="list-style-type: none"> <li>1. Accounting anomalies.</li> <li>2. Analytical anomalies.</li> <li>3. Behavioral symptoms.</li> <li>4. Internal control weaknesses.</li> <li>5. Lifestyle issues.</li> <li>6. Tips or complaints.</li> <li>7. Anomalous relationships.<sup>25</sup></li> </ol> <p>Red flags should be investigated until fraud is discovered or the anomaly is explained by reliance on applicable evidence. Instructors should place particular emphasis on the proactive recognition of red flags and other symptoms of fraud as a means of early detection of fraudulent activity.</p>	Identify which red flags likely indicate specific fraud acts and schemes, and the types of controls necessary to mitigate those fraud schemes. Design procedures to detect fraudulent activity.

<sup>22</sup> For fraud research metrics, see ACFE, *2004 Report to the Nation on Occupational Fraud and Abuse* (see note 13).

<sup>23</sup> ACFE, *Fraud Examiners Manual*, p. 4.503 (see note 5). Further, AICPA SAS No. 99 notes that not all three criteria of the fraud triangle need to be observable for fraud to be present. A fourth criterion, capability, is suggested in Wolfe, David, and Dana R. Hermanson, “The Fraud Diamond: Considering the Four Elements of Fraud,” *The CPA Journal* (December 2004): 38–42.

<sup>24</sup> Albrecht and Albrecht, *Fraud Examination & Prevention* (see note 7). See also ACFE, *Fraud Examiners Manual* (note 5).

<sup>25</sup> Adapted from Albrecht, W. Steve, Conan C. Albrecht, and Chad O. Albrecht, *Fraud Examination, Revised*, Mason, OH: Thomson South-Western, 2006.

<p>Understand fraud prevention, deterrence, detection, investigation, and remediation, including:</p> <ol style="list-style-type: none"> <li>1. Types of investigative skills.</li> <li>2. The relationship between internal controls and fraud.</li> <li>3. An understanding of management override (the ability of management to use its authority to avoid internal control mechanisms and structure).<sup>26, 27</sup></li> </ol>	<p>Identify control elements, including effective supervision to counter management override, necessary to prevent and deter specific fraud schemes as a foundation for fraud detection, investigation and remediation. This ability, once developed for specific fraud schemes, can be used as a basis for internal control assessment of other fraud schemes.</p>
<p><b><i>The Anti-Fraud Practitioner's Mindset</i></b></p>	
<p>Understand critical thinking, the importance of creative thinking and approaches to unstructured problem solving.</p>	<p>Identify opportunities to exploit control weaknesses (e.g., “think like a criminal”).</p>
<p>Understand anti-fraud environment, processes and controls: “tone at the top,” culture, strong control environment, code of conduct, open communications with suppliers and customers, employee monitoring, hotlines, whistleblower protection, punishing perpetrators and proactive fraud auditing.<sup>28</sup></p>	<p>Identify the different elements of good anti-fraud environments, processes and control procedures, and know how they work together. Analyze frauds and attempted frauds, identify systemic vulnerabilities and implement procedures to reduce the risk of fraud.</p>
<p><b><i>Forensic Accounting Engagements</i></b></p>	
<p>Understand the various types of forensic accounting engagements: damage claims, economic damages related to work-place issues, matrimonial investigations and assets and business valuations.</p>	<p>Identify required skill sets and be able to determine how to approach forensic accounting engagements, including litigation services and investigations.</p>

<sup>26</sup> See AICPA, “Management Override of Internal Controls: The Achilles’ Heel of Fraud Prevention—The Audit Committee and Oversight of Financial Reporting,” 2005, [www.aicpa.org/audcommctr/download/achilles\\_heel.pdf](http://www.aicpa.org/audcommctr/download/achilles_heel.pdf).

<sup>27</sup> Students should also be aware that attorneys, external accountants, investment bankers, and other services providers can become enablers of fraudulent activities and be alert for such conditions. Further, students need to understand that accountants and auditors can face criminal charges for these offenses just as the management that directed them can.

<sup>28</sup> Adapted from Albrecht et al., *Fraud Examination, Revised* (see note 25).

<b>Table 3</b>	
<b>Asset Misappropriation, Corruption, False Representations, and Other Fraud Acts</b>	
<b>What students should know</b>	<b>What students should be able to do</b>
<b><i>Prevention and Deterrence</i></b>	
An understanding of the elements of antifraud techniques and controls: “tone at the top,” culture, strong control environment, code of conduct, open communications with suppliers and customers, employee monitoring, hotlines, whistleblower protection, punishing perpetrators, and proactive fraud auditing. <sup>29</sup>	Evaluate the design of antifraud techniques and controls and test their operating effectiveness; make recommendations for improvement and assist in the implementation of fraud prevention programs.
<b><i>Fraud Detection: Risk Assessment, Testing of and Reliance on Internal Controls, and Proactive Auditing and Procedures</i></b> <sup>30</sup>	
Note: Fraud detection is normally centered around the fraud triangle: perceived pressure, rationalization, and opportunity, where fraud and forensic professionals recognize the symptoms (red flags) associated with fraud and conduct appropriate followup or proactively audit for fraud. <sup>31</sup>	
An understanding of fraud risk assessment, which occurs prior to fraud search, considering: <ol style="list-style-type: none"> <li>1. Identifiable fraud risks given the nature of the business, transactions, and any red flags observed.</li> <li>2. Schemes necessary to perpetrate a fraudulent act.</li> <li>3. Application of control and monitoring activities that may mitigate the opportunity to perpetrate fraud schemes.</li> </ol>	Conduct fraud risk assessments and evaluate the design and effectiveness of managements’ fraud risk assessment (including fraud risk and fraud scheme brainstorming) for a client situation.

<sup>29</sup> Adapted from Albrecht et al., *Fraud Examination, Revised* (see note 25).

<sup>30</sup> Fraud risk assessment requires experience, an understanding of fraudulent acts and schemes, and thinking like a fraudster. Fraud risk assessment is an activity distinct from management’s fraud risk assessment of the internal control environment and the auditor’s evaluation of management’s fraud risk assessment and the completion of his/her own assessment of the enterprise’s internal control environment, as required by regulatory and professional standards.

<sup>31</sup> By minimizing “opportunity,” management can minimize the possibility of fraudulent activity no matter what pressures and rationalizations a fraudster may have. Further, executive management may have a unique opportunity to commit fraud by overriding an entity’s internal controls and control structure.

<p>A sufficient understanding of internal controls to identify opportunities for fraud, the risk of management override and the possibility of collusion.</p>	<p>Recognize gaps between risks and controls.</p>
<p>An understanding of manual and automated controls and an understanding of the “softer” side of the control environment, as suggested by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).</p>	<p>Link risk assessment to controls and testing procedures to recognized vulnerabilities.</p>
<p>An understanding of the different procedures available to proactively search for fraud when symptoms of fraud have not been specifically identified, including data-mining and other digital analysis tools.</p>	<p>Identify symptoms of fraud in the workplace; design and conduct procedures to proactively search for fraud and evaluate the evidence collected to distinguish between fraud and errors.</p> <p>Plan and perform audit procedures to detect fraud:</p> <ol style="list-style-type: none"> <li>1. Identify risks.</li> <li>2. Identify possible symptoms and audit for those symptoms.</li> <li>3. Follow up on anomalous discoveries until the auditor can conclude that fraud has occurred or does not exist.</li> </ol>
<p><b><i>Fraud Investigation Methods and the Organization and Evaluation of Evidence</i></b></p>	
<p>Note: Fraud investigation is normally centered around the elements of fraud: the act, concealment, and conversion.</p>	
<p>An understanding of different fraud examination procedures (investigating the act, concealment, or conversion) in the gathering and evaluation of evidence; the risks of destroying evidence, chain of custody, obstructing justice, and impacting the willingness of individuals to cooperate during an investigation.</p>	<p>Develop an appropriate evidence-gathering plan that supports the strategy of the investigation or fraud audit and the ability to:</p> <ol style="list-style-type: none"> <li>1. Generate and test hypotheses related to potential frauds.</li> <li>2. Recognize differences in quality between different sources of evidence.</li> <li>3. Organize evidence using the hypothesis/evidence matrix, link charts (individuals, places, and organizations) and flow diagrams (internal controls; commodities such as money, events, and time).</li> <li>4. Evaluate (weigh) both confirmatory and refuting evidence.</li> <li>5. Perform and interpret ratio analysis, including comparisons across time and to key industry ratios.</li> </ol>

<p>An understanding of the importance of interviewing and interrogations to gather evidence of the act, concealment, and conversion; the different techniques for interviewing/interrogations and factors that impact the effectiveness of interviewing.</p>	<p>Conduct effective interviews to obtain evidence:</p> <ol style="list-style-type: none"> <li>1. Identify whom to interview.</li> <li>2. Prepare appropriately for the interview with a list of issues and questions to be covered.</li> <li>3. Ask good questions.</li> <li>4. Listen and evaluate the responses of the interviewee.</li> <li>5. Document the interview.</li> <li>6. Assess verbal and nonverbal communications (e.g., body language).</li> </ol>
<p>An understanding of ratio analysis and other analytical techniques.</p>	<p>Analyze financial and nonfinancial information as a basis for gathering evidence, forming hypotheses, and testing hypotheses.</p>
<p>An understanding of the different types of evidence of the act, concealment, and conversion, including testimonial, physical, and documentary evidence. An understanding of the uses of observation and surveillance.</p>	<p>Gather and analyze testimonial, physical, and documentary evidence:</p> <ol style="list-style-type: none"> <li>1. Analyze data using a specific item method (direct method of proof) of investigation, including analyzing bank records and tracing money through accounting systems.<sup>32</sup></li> <li>2. Analyze data using indirect methods of investigation, including the bank deposit method; analyze net worth and sources and applications of funds.<sup>33</sup></li> <li>3. Inspect documents.</li> <li>4. Maintain the chain/custody of evidence.</li> </ol>
<p>An understanding of the methods by which fraud is concealed.</p>	<p>Relate investigative techniques to uncover fraud to methods of concealment.</p>
<p>An understanding of the methods by which perpetrators hide assets.</p>	<p>Utilize methods for identifying hidden assets such as public records searches, searching for offshore banking activity, etc.</p>

<sup>32</sup> To be considered a direct method, the analysis must show a direct link between the financial transactions, the illegal activity, and the suspect. Such direct proof reveals the suspect's personal involvement and knowledge. See *Financial Investigations: A Forensic Approach to Detecting and Resolving Crimes*, IRS Publication 1714 (Rev.1-2002).

<sup>33</sup> Indirect methods provide circumstantial evidence. These are considered indirect because records do not speak for themselves and the investigator can not testify to the nature or category of the information because it would be considered hearsay. This is based on case law from *Greenberg v. United States*, 195 Fed. 903 (First Cir. 1961); *Holland v. United States*, 348 U.S. 121, 75 S. Ct. 127, 99 L.Ed. 150 (1954); and *United States v. Serrentino*, 726 F.2d 876, 879-880 (First Cir. 1984). See *Financial Investigations: A Forensic Approach to Detecting and Resolving Crimes*, IRS Publication 1714 (Rev.1-2002).

<p>An understanding of various sources of public and private information and how to search these databases, primarily in the area of conversion. Sources of information include: the Internet; financial and commercial databases; and Federal, State, and local government records.</p>	<p>Use various Federal, State, local, financial, commercial, legal, and demographic databases as investigative tools to identify hidden lifestyles, assets, and other evidence of conversion.</p>
<p>An understanding of working paper development and documentation of work performed, given the particular engagement:</p> <ol style="list-style-type: none"> <li>1. Need for completeness.</li> <li>2. Need to retrace steps of work performed, including working backward to original evidence (sometimes months/years after the completion of work performed).</li> <li>3. Document the basis for all opinions.</li> <li>4. Document all assumptions inherent in the analyses.</li> <li>5. Collect independent data when necessary.</li> <li>6. Log information received and reviewed: pleadings, documents, interrogatories, subpoenas, witness statements, depositions, expert reports, etc.</li> <li>7. Gather authoritative literature upon which evaluations, judgments, and opinions are developed.</li> </ol>	<p>Develop necessary working papers and other documentation appropriate for the matters under investigation, given fact patterns or classroom scenarios.</p>
<p><b>Reporting</b></p>	
<p>An understanding of the various forms of fraud engagement communications, including written reports, graphical presentation, and oral testimony, including:</p> <ol style="list-style-type: none"> <li>1. Circumstances exist where written reports may not be desirable.</li> <li>2. Attorneys will provide direction when it is appropriate to submit written reports and graphical presentations.</li> <li>3. Preliminary findings and communications are as important as final written, oral, and graphical work.</li> </ol> <p>Note: The importance of effective communication cannot be overemphasized</p>	<p>Communicate effectively, both orally and in writing:</p> <ol style="list-style-type: none"> <li>1. Oral Communication: case presentation, deposition, and courtroom testimony.</li> <li>2. Written Communication: report writing skills and techniques.</li> <li>3. Graphical Communication: pictorial representations of finished work.</li> <li>4. Active listening: listening, digesting, and questioning.</li> <li>5. Interpersonal skills.</li> </ol>

<b><i>Remediation</i></b>	
An understanding of the different types of remediation: civil litigation and criminal prosecution; referral to appropriate civil, criminal, or regulatory authority; arbitration and mediation; employee dismissal; human resources action; restitution; insurance claim(s); and addressing internal control shortcomings.	Work with victim to identify the most appropriate remedial response to resolve the matter under investigation.
An understanding of the different techniques available to estimate the amount of losses and implement the processes available for seeking restitution, including: insurance, court-awarded damages, and remediation through other actions.	Estimate losses arising from fraud, develop damage claims, and assist clients in recovering losses.
A recognition of the need for fraud prevention and deterrence through the identification of internal control deficiencies and determination of vulnerabilities and/or root causes of fraud.	Assist client in identifying internal control weaknesses that provided the opportunity for fraud and in developing appropriate controls to prevent and deter similar frauds.

## Table 4 Financial Statement Fraud

### **Note to instructors of traditional (external or internal) auditing courses:**

Guidance related to auditors' responsibilities in the area of fraud is provided for external auditors in AICPA SAS No. 99 and for internal auditors in Practice Advisory 1210.A2-1 and 1210.A2-2. Instructors who want to modify existing auditing course content to provide students with exposure to financial statement fraud should consider the Core Curriculum for Fraud and Forensic Accounting (above) and the material outlined below.

Related to external auditors, students should understand that the discovery of fraud is a relatively rare event, but financial statement fraud can and does occur. Professionals need to be diligent in risk assessment, the search for symptoms, and the investigation of anomalous situations, while maintaining a healthy level of professional skepticism.

Some of the lessons from research and AICPA SAS No. 99 include:<sup>34</sup>

1. The discovery of financial statement fraud is a rare event.
2. Financial statement fraud can occur in any business environment, sometimes with catastrophic consequences.
3. Financial statement fraud often involves management override.
4. Frequency-of-occurrence information (fraud statistics) helps students understand the nature of financial statement fraud.
5. Contextual information is necessary to determine the probability and existence of financial statement fraud.
6. Financial statement fraud, in most instances, involves collusion between members of the management team and/or senior management.

Tax reporting fraud is most analogous to financial statement fraud because it is based on false representations put forth by the perpetrator. As such, the knowledge, skills, and abilities outlined in this and other sections are also applicable for tax fraud. Students should understand that any statements (financial, tax returns, etc.) created from corrupted underlying books and records will be erroneous. Further, when indicators of financial statement fraud are present, investigators should also consider the possibility of tax fraud, and vice versa.<sup>35</sup>

<sup>34</sup> The AICPA has issued a discussion memorandum entitled: "Forensic Services, Audits and Corporate Governance: Bridging the Gap" to address the consideration of forensic accounting professionals and forensic accounting techniques in connection with the financial statement audit.

<sup>35</sup> Indicators of tax fraud include admissions by taxpayers; omitted taxable income; questionable related party and nominee transactions false financial statements; a pattern of bankruptcy; unnecessarily complex business structures; ghost employees; multiple sets of books and records; false expense, invoice, or other documentation; altered documents; bank account reconciliation anomalies (business and personal); and lifestyle symptoms.



What students should know	What students should be able to do
<b><i>Financial Accounting and Auditing</i></b>	
A sufficient understanding of auditing and accounting issues related to the client's specific business environment.	Identify situations in which specialists/experts should be consulted.
<p>An understanding of the major areas of financial statement fraud:<sup>36</sup></p> <ol style="list-style-type: none"> <li>1. Fictitious revenue (and related assets).</li> <li>2. Timing differences of revenue and expense.</li> <li>3. Concealed liabilities.</li> <li>4. Inadequate/misleading disclosures.</li> <li>5. Improper asset valuation.</li> <li>6. Improper/inappropriate capitalization of expenses.</li> </ol>	Identify characteristics of the entity that may increase the likelihood of various areas of financial statement fraud and identify various fraud schemes based on fact patterns, likelihood of occurrence, and significance of potential losses.
<b><i>Prevention and Deterrence</i></b>	
An understanding of antifraud techniques and controls: "tone at the top," culture, strong control environment, code of conduct, open communications with suppliers and customers, employee monitoring, hotlines, whistleblower protection, punishing perpetrators, monitoring contractual parties, and proactive fraud auditing. <sup>37</sup>	Evaluate the design of antifraud techniques and controls and test their operating effectiveness, make recommendations for improvement, and assist in the implementation of fraud prevention programs.

<sup>36</sup> ACFE, *Fraud Examiners Manual*, 2005, Section 1.3 (see note 5). See alternative taxonomies: Albrecht et al., *Fraud Examination, Revised* (see note 25); Bonner, Sarah E., Zoe-Vonna Palmrose, and Susan M. Young, "Fraud Type and Auditor Litigation," *The Accounting Review* 73 (4) (October 1998): 503-532; Carcello, Joseph V., Mark S. Beasley, and Dana R. Hermanson, *Fraudulent Financial Reporting: 1987-1997—An Analysis of U.S. Public Companies*, New York: COSO, 1999. Crumbley et al., *Forensic and Investigative Accounting*, (see note 3).

<sup>37</sup> Adapted from Albrecht et al., *Fraud Examination, Revised* (see note 25).

<p><b><i>Fraud Detection: Risk Assessment, Reliance on and Testing of Internal Controls, and Proactive Auditing Procedures</i></b><sup>38</sup></p>	
<p>Note: Fraud detection is normally centered around the fraud triangle: perceived pressure, rationalization, and opportunity, where fraud and forensic professionals recognize the symptoms (red flags) associated with fraud and conduct appropriate followup or proactively audit for fraud.<sup>39</sup></p>	
<p>A sufficient understanding of fraud risk assessment, prior to a search for fraud, that considers:</p> <ol style="list-style-type: none"> <li>1. Identifiable fraud risks given the nature of the business, transactions, and any red flags observed.</li> <li>2. Schemes necessary to perpetrate a fraudulent act.</li> <li>3. Introduction of control activities that may mitigate the opportunity to perpetrate fraud schemes.</li> </ol>	<p>Conduct a fraud risk assessment, including brainstorming, for a client situation.</p>
<p>A sufficient understanding of internal controls to identify opportunities for fraud, the risk of management override, and the possibility of collusion.</p>	<p>Recognize gaps between risks and controls.</p>
<p>An understanding of manual and automated controls and an understanding of the “softer” side of the control environment, as suggested by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).</p>	<p>Link risk assessment to controls and testing procedures to recognized vulnerabilities.</p>

<sup>38</sup> Fraud risk assessment requires experience, an understanding of fraudulent acts and fraud schemes, and thinking like a fraudster. Fraud risk assessment is an activity distinct from management’s fraud risk assessment of the internal control environment and the auditor’s evaluation of management’s fraud risk assessment and the completion of his/her own assessment of the enterprise’s internal control environment, as required by regulatory and professional standards. Most investigators suggest that it is beneficial to separately consider categories of fraud acts separately from fraud risk.

<sup>39</sup> By minimizing “opportunity,” management can minimize the possibility of fraudulent activity no matter what pressures and rationalizations a potential fraudster may have. Further, executive management may have a unique opportunity to commit fraud by overriding an entity’s internal control structure.

<p>An understanding of the red flags that may indicate financial statement fraud and an understanding of the importance of focusing on the organizational structure; managements' incentives, backgrounds, and transactions with others; and financial statement operating statistics (financial ratios and nonfinancial data) in detecting fraud. Particular attention should be focused on pressure for management to manipulate earnings.</p>	<p>Scrutinize management carefully: the organizational structure, operational performance that is inconsistent with the industry, and transactions with affiliated parties.</p>
<p>An understanding of the different procedures available to proactively search for fraud when symptoms of fraud have not been specifically identified:</p> <ol style="list-style-type: none"> <li>1. Review of journal entries.</li> <li>2. Review of important estimates.</li> <li>3. Review of infrequent and unusual transactions.</li> <li>4. Plan and perform audit procedures to detect fraud:             <ol style="list-style-type: none"> <li>a. Identify risks.</li> <li>b. Identify possible symptoms and audit for those symptoms.</li> <li>c. Follow up on anomalous discoveries until the auditor can conclude that fraud has occurred or does not exist.</li> </ol> </li> </ol>	<p>Identify symptoms of financial statement fraud and design and conduct procedures to proactively search for fraud. Evaluate the evidence collected to distinguish between nonfraudulent conditions, fraud, and errors.</p>
<p><b><i>Fraud Investigation Methods and the Organization and Evaluation of Evidence</i></b></p>	
<p>Note: Fraud investigation is normally centered around the elements of fraud: the act, concealment, and conversion.</p>	

<p>An understanding of different fraud examination procedures (investigating the act, concealment, or conversions)<sup>40</sup> in the gathering and evaluation of evidence, and the risks of destroying evidence, chain of custody, obstructing justice, and impacting the willingness of individuals to cooperate during an investigation.</p>	<p>Develop an appropriate evidence gathering plan that supports the strategy of the investigation or fraud audit and have the ability to:</p> <ol style="list-style-type: none"> <li>1. Generate and test hypotheses related to potential frauds.</li> <li>2. Recognize differences in quality between different sources of evidence (e.g., original source documents versus fictitious evidence, and management explanations without corroborating evidence).</li> <li>3. Organize evidence using the hypothesis/evidence matrix, link charts (individuals, places, and organizations) and flow diagrams (internal controls; commodities such as money, events and time).</li> <li>4. Evaluate (weigh) both confirmatory and refuting evidence.</li> <li>5. Perform and interpret ratio analysis, including comparisons across time and to key industry ratios. Students need to possess solid analytical procedure skills, including an ability to incorporate nonfinancial measures in their assessment of financial data.</li> </ol>
<p>An understanding of the importance of interviewing and interrogations to gather evidence of the act, concealment, and conversion; the different techniques for interviewing/interrogations; and factors that impact the effectiveness of interviewing.</p>	<p>Conduct effective interviews to obtain evidence:</p> <ol style="list-style-type: none"> <li>1. Identify whom to interview.</li> <li>2. Prepare a list of issues and questions to be covered in the interview.</li> <li>3. Ask a broad range of thoughtfully planned questions.</li> <li>4. Listen to and evaluate the responses of the interviewee.</li> <li>5. Document the interview.</li> <li>6. Assess verbal and nonverbal communications (e.g., body language).</li> </ol>

<sup>40</sup> See “Elements of Fraud” in Core Curriculum for Fraud Section. Related to financial statement fraud, conversion is usually indirect in the form of management incentives: bonuses, salary increases, reputation, and market value increases in stock prices that affect the value of stock shares held and stock options.

<p>An understanding of the different types of evidence (e.g., testimonial, physical, documentary, direct, and circumstantial) of the act, concealment, and conversion, including the appropriate and effective use of observation and surveillance.</p>	<p>Gather and analyze testimonial, physical, and documentary evidence:</p> <ol style="list-style-type: none"> <li>1. Analyze data using a specific item method (direct method of proof) of investigation, analyze bank records, and trace money through accounting systems.<sup>41</sup></li> <li>2. Analyze data using indirect methods of investigation, including the bank deposit method; analyze net worth and sources and applications of funds.<sup>42</sup></li> <li>3. Inspect documents.</li> <li>4. Maintain the chain/custody of evidence.</li> </ol>
<p>An understanding of the methods by which financial statement fraud is concealed.</p>	<p>Relate investigative techniques to uncover fraud to methods of concealment.</p>
<p>An understanding of various sources of public and private information and how to search these databases, primarily in the area of conversion. Sources of information include the Internet; financial and commercial databases; and Federal, State and local government records.</p>	<p>Use various Federal, State, local, financial, commercial, legal, and demographic databases as an investigative tool to search for related parties, related companies, and other means by which the perpetrators may benefit from the financial statement fraud.</p>

<sup>41</sup> To be considered a direct method, the analysis must show a direct link between the financial transactions, the illegal activity, and the suspect. Such direct proof reveals the suspect's personal involvement and knowledge. See *Financial Investigations: A Forensic Approach to Detecting and Resolving Crimes*, IRS Publication 1714 (Rev.1-2002).

<sup>42</sup> Indirect methods provide circumstantial evidence. These are considered indirect because records do not speak for themselves and the investigator can not testify to the nature or category of the information because it would be considered hearsay. This is based on case law from *Greenberg v. United States*, 195 Fed. 903 (First Cir. 1961); *Holland v. United States*, 348 U.S. 121, 75 S. Ct. 127, 99 L.Ed. 150 (1954); and *United States v. Serrentino*, 726 F.2d 876, 879-880 (First Cir. 1984). See *Financial Investigations: A Forensic Approach to Detecting and Resolving Crimes*, IRS Publication 1714 (Rev.1-2002).

<p>An understanding of financial statement analysis techniques.</p>	<p>Analyze financial statements to detect indicators of fraud and perform and interpret relevant analytical procedures, including risk factors identified in AICPA SAS No. 99. Perform and interpret ratio analyses, including comparisons across time and to key industry ratios. Students need to develop solid analytical procedure skills, including the ability to incorporate nonfinancial measures in their assessment of financial data. This requires students to utilize these analytical screening tools to identify red flags and follow up on all anomalies until fraud is discovered or the anomaly is explained by reliance on definitive evidence.<sup>43</sup></p>
<p>An understanding of audit techniques and procedures for detecting fictitious transactions and events.</p>	<p>Apply audit techniques to detect false transactions and events, and identify possible forged documents that require additional expert analysis.</p>
<p>An understanding of the importance of management estimates to the financial reporting process.</p>	<p>Test and challenge the assumptions underlying management estimates.</p>
<p>An understanding of working paper development and documentation of work performed, given the particular engagement:</p> <ol style="list-style-type: none"> <li>1. Be complete.</li> <li>2. Retrace steps of work performed, including working backward to original evidence (sometimes months/years after the completion of work performed).</li> <li>3. Document basis for all opinions.</li> <li>4. Document all assumptions inherent in the analysis.</li> <li>5. Collect independent data when necessary.</li> <li>6. Log information received and reviewed: pleadings, documents, interrogatories, depositions, expert reports, etc.</li> <li>7. Base evaluations, judgments, and opinions on authoritative literature.</li> </ol>	<p>Develop necessary working papers and other documentation appropriate for the matter under investigation.</p>

<sup>43</sup> Case developers and instructors need to be cautious of ex post analysis using hindsight (“perfect”) knowledge. Once discovered, fraud becomes easy to identify; however, red flag indicators are usually ambiguous, suggesting that additional appropriate followup work be initiated and completed. In most cases, investigators will determine that no fraud exists based on review of evidentiary material.

<p><b>Reporting</b></p> <p>An understanding of the various forms of fraud engagement communications, including written reports, graphical presentation, and oral testimony, including:</p> <ol style="list-style-type: none"> <li>1. Circumstances exist where written reports may not be desirable.</li> <li>2. Attorneys will provide direction when it is appropriate to submit written reports and graphical presentations.</li> <li>3. Preliminary findings and communications are as important as final written, oral and graphical work.</li> </ol> <p>Note: The importance of effective communication cannot be overemphasized.</p>	<p>Communicate effectively, both orally and in writing:</p> <ol style="list-style-type: none"> <li>1. Oral Communication: case presentation, deposition, and courtroom testimony.</li> <li>2. Written Communication: report writing skills and techniques.</li> <li>3. Graphical Communication: pictorial representations of finished work.</li> <li>4. Active listening: listening, digesting, and questioning.</li> <li>5. Interpersonal skills.</li> </ol>
<p><b>Remediation</b></p> <p>An understanding of the different techniques available to estimate the amount of losses and implement the processes available for seeking restitution including: insurance, court-awarded damages, and remediation through other actions.</p>	<p>Estimate losses arising from fraud, develop damage claims, and assist clients in recovering losses.</p>
<p>A recognition of the need for fraud prevention and deterrence by identifying internal control deficiencies to determine vulnerabilities and/or root causes of fraud.</p>	<p>Assist client in identifying internal control weaknesses that provide the opportunity for fraud and in developing appropriate controls that prevent and deter similar frauds.</p>
<p><b>Special Legal and Regulatory Issues</b></p>	
<p>An understanding of various international, Federal, State, and local statutes and concepts (e.g., 1933 and 1934 Acts, Foreign Corrupt Practices Act,<sup>44</sup> and Sarbanes-Oxley).</p>	<p>Apply knowledge of legal statutes and concepts in order to understand risk and address the legal risks associated with the engagement, including Sarbanes-Oxley Act of 2002 and limitations on nonaudit services for public companies.</p>

<sup>44</sup> A facilitating ("grease") payment is a payment for "routine non-discretionary governmental action," such as obtaining permits, processing papers, providing normal government services, etc. It is not a payment to a government or an official to obtain discretionary influence. Facilitating payments are permitted under the U.S. Foreign Corrupt Practices Act provided that they are legal in that country.

**Table 5**  
**Fraud and Forensic Accounting in a Digital Environment**

What students should know	What students should be able to do
<b><i>Prevention and Deterrence</i></b>	
Knowledge of information technology (IT) governance and IT risk assessment.	Make the “business case” for fraud prevention controls in a case scenario.
An understanding of transaction processing systems, including both manual and computerized controls.	Conduct a risk assessment given a specific scenario, fact pattern, or dataset with particular attention to IT controls, threats, and exposures. (Given the information and boundaries provided by the instructor, students should be able to conduct a general IT control review and evaluate the effectiveness of general and application controls for mitigating such risks. Such an evaluation should be used as a model to approach other situations or specific fraud risks.)
An understanding of the ways in which IT systems are typically used in frauds and other crimes and how IT security is commonly breached or circumvented.	Develop fraud prevention programs to prevent, deter, and detect the use of IT systems to commit fraud and other criminal acts.
<b><i>Digital Evidence</i></b>	
<b>Note to instructors:</b>	
<p>One of the main concerns of the TWG in the digital environment is related to the initial acquisition of digital evidence. In this environment, entry-level professionals may attempt to do too much when they first encounter digital evidence. For example, even the simple act of turning on a confiscated computer can make all the evidence on that computer inadmissible in a courtroom environment. The purpose of the following section is to provide students with exposure to digital evidence but with the warning that only those persons with specialized training, experience, and appropriate professional certifications should initially handle digital evidence.</p>	
An understanding of the special requirements for digital evidence collection and preservation for forensic investigations.	Apply the rules for appropriate handling and custody of evidence in an investigative scenario.
Knowledge of various types of digital evidence that can be used in an investigation, such as metadata in documents, EnCase, e-mail headers and tracers, and security and audit logs.	Identify and utilize digital evidence in a case scenario.
Knowledge of online resources (public records, such as business filings and registrations, court records).	Use the Internet and other resources to investigate and collect evidence.



<p>An understanding of how forensic accountants interact with other specialists in coordinating vulnerability testing, ethical hacking, or intrusion detection.</p>	<p>Recognize situations that require information security or computer forensic specialists.</p>
<p>Knowledge of the rules related to e-discovery.</p>	<p>Explain the impact of e-discovery on policies related to records retention, appropriate use of e-mail, etc.</p>
<p><b><i>Detection and Investigation</i></b></p>	
<p>Knowledge that perpetrators actively seek to cover up their frauds and an understanding of how such attempts may lead to conflicting evidence. Knowledge of proper procedures as well as what not to do when discovering suspicious activity.</p>	<p>Articulate how various types of fraud would manifest themselves in company records, identify the issues related to computer assisted audit tools and techniques (CAATTs) engagements, and identify necessary expertise.</p>
<p>Knowledge of files affected by various fraud activities and schemes, and familiarity with the relationships among various electronic files. Familiarity with hardware available to capture digital evidence such as RoadMASter, SF-5000 forensic hardware, write blockers, and techniques to recover deleted files.</p>	<p>Identify appropriate methods of analysis to detect specific types of fraud.</p> <p>Generate and test hypotheses to distinguish between errors and actual fraud and to resolve ambiguous and conflicting evidence.</p>
<p>Knowledge of the various software packages available for data extraction and analysis, including data mining and continuous monitoring and auditing software.<sup>45</sup></p>	<p>Utilize at least one generalized audit software package such as IDEA or ACL for data extraction and analysis.</p> <p>Utilize computer-based tools such as Excel, ACCESS, and generalized audit software (ACL, IDEA) to create detection tools and to detect suspicious transactions. Conduct tests for the following:</p> <ol style="list-style-type: none"> <li>1. Unmatched invoices/transactions.</li> <li>2. Duplicate invoices/transactions.</li> <li>3. Missing invoices/transactions.</li> <li>4. Unusual variances.</li> <li>5. Ratio and trend analysis.</li> <li>6. Statistical anomalies.</li> </ol> <p>These are usually discovered through regressions and simulations, data-mining, pattern recognition software, horizontal and vertical analyses, analysis of journal entries in a digital environment, and other digital analysis.</p>

<sup>45</sup> See Institute of Internal Auditors, *Global Technology Audit Guide (GTAG) on Continuous Auditing: Implications for Assurance, Monitoring, and Risk Assessment*, Altamonte Springs, FL: Institute of Internal Auditors, 2005, [www.theiia.org/guidance/technology/gtag/gtag3/](http://www.theiia.org/guidance/technology/gtag/gtag3/).

Knowledge of the various software packages available for case management.	Explain how link analysis packages, such as Analyst's Notebook, are used to analyze and present data using time lines and themes.
General knowledge of tools and techniques used by forensic computer scientists for retrieving files from seized computers and of how the work of forensic accountants must be coordinated with forensic computer specialists.	Identify situations where a forensic computer specialist must be employed and explain how legal proceedings against a perpetrator can be jeopardized if evidence is gathered by an investigator who lacks appropriate skills.
<b>Reporting</b>	
An understanding of various forms of communications including written reports, graphical presentation, and oral testimony.	Document and present the results of work performed.
Knowledge of the various software tools available to explain and report fraud investigative findings.	Use software to analyze and present data using time lines and themes, both graphically and in narratives.
<b>Cybercrime</b>	
Basic knowledge of types of cybercrime.	Recognize situations that require information security or computer forensic specialists.
An understanding of laws related to cybercrime (e.g., relevant sections of U.S.C. Title 18), intellectual property, and privacy.	Recognize situations that violate criminal laws, rights to privacy, and other related issues.

## Model Curriculum for Forensic and Litigation Advisory Services

Forensic and Litigation Advisory Services (FLAS) professionals provide educational, technical, functional, and industry-specific services that often apply to occupational fraud, corruption, and abuse, and financial statement fraud cases. FLAS professionals can assist attorneys with assembling the financial information necessary to either bolster (if hired by the plaintiff) or undercut (if hired by the defendant) a case. They provide varying levels of support: from a specific scope that involves analysis, data mining, and documentation to a more broad approach that includes developing litigation strategies, arguments, and testimony in civil and criminal cases. Engagements typically include the investigation of damage claims, workplace and matrimonial issues, and assets and business valuations.

Forensic and litigation advisory services require interaction with attorneys throughout the engagement and excellent communication skills during the engagement and during the final stages of mediation, arbitration, negotiation, deposition, and/or testimony. Thus, communication skills (oral, pictorial/graphical, and written) are critical in the forensic and litigation advisory arena. Like all fraud and forensic accounting work, there is an adversarial nature to the engagements, and professionals can expect that their work will be carefully scrutinized.

From a pedagogical perspective, the study of forensic and litigation advisory services provides an excellent opportunity to develop capstone experiences and integrate skills developed in all of the fraud and forensic accounting specialty areas.

<b>Table 6</b>	
<b>Forensic and Litigation Advisory Services</b>	
<b>What students should know</b>	<b>What students should be able to do</b>
<b><i>Definition of Forensic and Litigation Services</i></b>	
<p>An understanding that forensic accounting is the application of accounting principles, theories, and discipline to facts or hypotheses at issue in a legal dispute. Forensic accounting encompasses every branch of accounting knowledge, and consists of two major components: litigation services and investigative services.<sup>46</sup></p>	

<sup>46</sup> The AICPA Forensic and Litigation Committee developed this definition. See the AICPA Business Valuation and Forensic & Litigation Services Center website, <http://bvfls.aicpa.org/>.

<b>Overview of Services</b>	
An understanding of criminal, civil, and administrative engagements and the types of forensic and litigation advisory services provided (e.g., lost wages, valuations, construction delays, business interruption, insurance claims, divorce, fraud, antitrust, intellectual property, environmental, tax, etc.). <sup>47</sup>	Identify issues related to the forensic and litigation advisory engagement, identify necessary expertise, and identify appropriate methods of analysis.
An understanding of the qualifications for the fraud and forensic accountant to support a litigation activity, including credibility and reliability related to the work to be completed.	Have the skills and abilities required to competently complete the engagement.
An understanding of the differences between testifying expert witnesses and nontestifying advisors/consultants.	An ability to distinguish between facts, opinions, and interpretations of facts, and how these potentially impact the outcome of litigation.
<b>Research and Analysis</b>	
An understanding of the various approaches to research and analysis.	Generate and test hypotheses of potential “causes of action.” <ol style="list-style-type: none"> <li>1. Identify critical information and evidence.</li> <li>2. Examine underlying books and records.</li> <li>3. Identify important assumptions underlying analyses and the impact of assumptions on conclusions.</li> </ol>
An understanding of the various approaches to financial and economic modeling and how to use authoritative sources for model selection.	Perform appropriate model calculations: <ol style="list-style-type: none"> <li>1. Out-of-pocket costs.</li> <li>2. Losses (lost profits, lost value, lost cash flows).</li> <li>3. Incremental and marginal revenue and costs.</li> <li>4. Appropriate loss period.</li> <li>5. Time value of money.</li> </ol>
Knowledge of business, how businesses make money, and important economic and industry trends.	Conduct appropriate analyses of the economy, industry, competition, and company, and identify the impact of those analyses on the engagement.
Knowledge of rules of evidence as they apply to forensic and litigation advisory services and an understanding of the assertion of legal privilege.	Identify and create various types of evidence, including worksheets, spreadsheets, fact summaries and graphics.

<sup>47</sup> Adapted from Crumbley et al., *Forensic and Investigative Accounting*, (see note 3). See also: AICPA Business Valuation and Forensic & Litigation Services Center website, <http://bvfls.aicpa.org/>.

<b>Damages</b> <sup>48</sup>	
A general knowledge of the nature and purpose of damages, including remedies.	Identify conditions that suggest torts and breach of contract based on review and evaluation of financial statements and underlying books and records.
An understanding of the types of damages: restitution, reliance, and punitive.	Create damage claims based on assumptions provided by attorneys and consistent with investigation facts and findings.
<p>Knowledge of the following areas related to commercial damages:</p> <ol style="list-style-type: none"> <li>1. Types of damages—equitable and legal—and what damages are intended to achieve.</li> <li>2. Nature and purpose of commercial damages, emphasizing: calculations, analyses, cost behavior, incremental revenues and expenses, causality, liability, and remedies.</li> <li>3. Finance and economics, including: damage models, authoritative sources, and secondary sources</li> <li>4. Cost behavior: fixed, variable, and mixed.</li> </ol>	<p>Analyze:</p> <ol style="list-style-type: none"> <li>1. Damage claims (develop and critique).</li> <li>2. Cost behavior: fixed, variable, and mixed costs.</li> <li>3. Financial statements.</li> <li>4. Nonfinancial data to evaluate financial relationships.</li> <li>5. Underlying assumptions and their impact.</li> <li>6. Limitations of one's expertise.</li> </ol>
<b>Valuations</b>	
Knowledge of the nature and purpose of business valuations, including valuations of closely held businesses, stand-alone business activities, and intellectual property, completed for the following purposes: estates and divorce settlement, mergers and acquisitions, dissolutions, insurance, business interruptions, and property loss. Familiarity and compliance with the professional valuation standards. <sup>49</sup>	Develop, defend, and critique business valuation analyses from business, financial, tax, and other records.

<sup>48</sup> See Chapter 10 of Crumley et al., *Forensic and Investigative Accounting*, (note 3).

<sup>49</sup> See AICPA Exposure Draft of Proposed Business Valuation Standards, <http://bvfls.aicpa.org/Resources/Business+Valuation/Update+on+the+AICPA+Proposed+Valuation+Stand+ard.htm> See also the websites of the National Association of Certified Valuation Analysts, [www.nacva.com/](http://www.nacva.com/) and ACFE, [www.acfe.com/home.asp](http://www.acfe.com/home.asp).

<p><b><i>Working Papers</i></b></p> <p>An understanding of working paper development and documentation of work performed, given the particular engagement:</p> <ol style="list-style-type: none"> <li>1. Be complete.</li> <li>2. Retrace steps of work performed, including working backward to original evidence.</li> <li>3. Document basis for all opinions.</li> <li>4. Document all assumptions inherent in the analysis.</li> <li>5. Collect independent data when necessary.</li> <li>6. Log information received and reviewed: pleadings, documents, interrogatories, depositions, expert reports, etc.</li> <li>7. Base evaluations, judgments, and opinions on authoritative literature.</li> </ol>	<p>Develop necessary working paper and other documentation appropriate for the matter under investigation.</p>
<p><b><i>Reporting</i></b></p> <p>An understanding of various forms of communications, including: written reports, graphical presentation, and oral testimony:</p> <ol style="list-style-type: none"> <li>1. The adversarial nature of the litigation environment.</li> <li>2. An appreciation that the work will be closely scrutinized.</li> <li>3. An appreciation for high quality work.</li> </ol> <p>Note: The importance of effective communication cannot be overemphasized.</p>	<p>Communicate effectively, both orally and in writing:</p> <ol style="list-style-type: none"> <li>1. Oral Communication: case presentation, courtroom testimony.</li> <li>2. Written Communication: report writing skills and techniques.</li> <li>3. Active listening: listening, digesting, and questioning.</li> <li>4. Interpersonal skills.</li> <li>5. Visual and graphical presentations.</li> </ol>

## **Framework for Curriculum Decisionmaking**

Individual colleges, universities, and training providers have different program goals, objectives, and priorities. The TWG considered these types of institutional choices, issues, and concerns as a backdrop for developing a model curriculum for fraud and forensic accounting. While a model curriculum does not provide specific implementation guidance, this model provides the flexibility for colleges, universities, and training providers to embrace opportunities within fraud and forensic accounting as they make decisions consistent with their programmatic goals, objectives and priorities.

### **Boundaries of Fraud and Forensic Accounting**

Fraud and forensic accounting integrate well with traditional accounting courses, particularly with auditing (attestation and assurance services). Schools will need to delineate which fraud issues are to be covered in each course. Further, this subject area interfaces with related disciplines: law, computer science, criminal justice, intelligence, economics, business administration, and information systems. This interface provides an opportunity for collaboration with other colleges, divisions, and departments across campus, and coordination with such other programs should be beneficial to all parties involved.

### **Teaching Tools and Techniques to Develop Skills**

The TWG recognizes that to develop skills, students need hands-on experience. While choice of course material (textbooks, case studies, videos, software, data sets, hands-on materials, general discussion cases and cases that include review and evaluation of general ledger entries, source documents, cancelled checks, bank statements, etc.) is important, students seem to digest the material more effectively when they get hands-on experience. An option available in larger cities may be a required fraud and forensic accounting internship. Other hands-on activities that can build skills include moot court exercises, data mining extraction and analysis, simulated cases and investigations, and fraud reporting exercises based on case details and fact patterns.

Fraud and forensic accounting are comprehensive fields that provide an opportunity for colleges and universities to integrate and assess skills developed throughout undergraduate and graduate programs. The study of fraud and forensic accounting engages most accounting skill sets and provides the opportunity to integrate with other nonbusiness units throughout the university community, breaking down traditional silos.

## **Hurdles to Course Adoption and Practical Solutions for Colleges and Universities:**

### **Budgetary Concerns**

- Issue: Budget cuts, particularly at publicly funded schools, make it economically difficult for schools to add new courses and programs. Similarly, budget cuts have caused many business schools to allocate resources with the goal of pursuing opportunities that generate revenue.
- Solution: Most colleges and universities have some underutilized resources. In response, many create incentives for academic units to develop programs that utilize resources to their fullest potential.

### **Programmatic Goals**

- Issue: Many business schools compete on the basis of MBA program rankings and allocate resources accordingly.
- Solution: The topical material in the fraud and forensic accounting curriculum can be incorporated into current curriculum offerings to enhance the MBA degree. In addition, several fraud and forensic accounting courses may be packaged to create a viable minor or track that can enhance the choices available to MBA students. It can also be marketed easily to students because of the professional opportunities available to program graduates.

### **Instructor Experience—Development of Skilled Faculty**

- Issue: Most professors lack practical experience in the area of fraud and forensic accounting. They may be unwilling to teach a class in which they are unable to answer students' questions.
- Solution: Fraud examiners and forensic accountants are often willing to serve as guest instructors at programs run by experienced college professors. Several different instructors may each teach one classroom session while the college professor supervises and teaches the more theoretical sessions. Some practitioners are available to serve as adjunct professors teaching an entire course. In addition, the AICPA and ACFE provide instructional materials and opportunities for professors to train and network with practicing professionals in order to develop their practical knowledge. Some fraud professionals and forensic accountants can provide instructional services upon retirement. Finally, some faculty may be able to get summer residencies and spend sabbaticals with firms offering these types of services or attend in-house professional development activities offered by firms to their professional staffs. The ACFE currently offers instructional material to course providers without charge.



## **Assessment of Program Objectives**

Administrators and faculty need to develop assessment tools to determine whether students have obtained the knowledge, skills, and abilities necessary to enter the profession. A number of mechanisms can be used to assess programs and courses: (a) The ability of students to obtain and retain entry-level employment, (b) observations and evaluations of oral and written reports, moot courts, and other class assignments by outside subject matter experts , (c) projects, (d) exams, and (e) other assignments.

## **Appendix A**

### **References for Fraud and Forensic Accounting**

The TWG does not endorse nor make any specific recommendations of course materials, textbooks, etc. The listing of references below is not intended to be a complete list of all resources available but lists the primary references identified and utilized by the TWG in the creation of this document.

#### **Textbooks and Instruction Materials**

Albrecht, W. Steve, Conan C. Albrecht, and Chad O. Albrecht. *Fraud Examination. Revised.* Mason, OH: Thomson South-Western, 2006.

Albrecht, W. Steve, and Chad O. Albrecht. *Fraud Examination & Prevention.* Mason, OH: Thomson South-Western, 2003.

Anastasi, Joe. *The New Forensics: Investigating Corporate Fraud and the Theft of Intellectual Property.* Hoboken, NJ: John Wiley & Sons, 2003.

Association for Certified Fraud Examiners. *Fraud Examiners Manual*, 2005.

Bologna, G. Jack, and Robert J. Lindquist. *Fraud Auditing and Forensic Accounting.* Hoboken, NJ: John Wiley & Sons, 1995.

Caseware IDEA, Inc. *IDEA 2004 Workbook*, 2004.

Cheffers, Mark, and Michael Pakaluk. *Understanding Accounting Ethics.* Manchaug, MA: Allen David Press, 2005.

Crumbley, D. Larry, Lester E. Heitger, and G. Stevenson Smith. *Forensic and Investigative Accounting.* Chicago: CCH Incorporated, 2005.

Davia, Howard R., Patrick C. Coggins, John C. Wideman, and Joseph T. Kastantin. *Accountant's Guide to Fraud Detection and Control.* Somerset, NJ: John Wiley & Sons, 2000.

DiGabriele, James, ed. *Forensic Accounting in Matrimonial Divorce.* Philadelphia: Edwards, Inc., 2005.

Friedman, Jack P. *Litigation Services Handbook Case Studies: Accounting, Economic, and Financial Issues in Litigation Support Research.* Hoboken, NJ: John Wiley & Sons, 2003.

Internal Revenue Service. *Financial Investigations: A Forensic Approach to Detecting and Resolving Crimes.* IRS Publication 1714 (Rev. 1-2002), Washington, DC: Internal Revenue Service, 2002.

IT Governance Institute. *IT Control Objectives for Sarbanes-Oxley*. Rolling Meadow, IL: IT Governance Institute, 2004.

Lanza, Richard B. *Proactively Detecting Occupational Fraud Using Computer Audit Reports*. Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation, 2004.

Mena, Jesus. *Investigative Data Mining for Security and Criminal Detection*. Oxford, UK: Butterworth Heinemann, 2003.

Wells, Joseph T. *Principles of Fraud Examination*. Hoboken, NJ: John Wiley & Sons, 2005.

Wells, Joseph T. *Occupational Fraud and Abuse*. Austin: Obsidian Publishing Co., 1997.

### **Journals Devoted to Fraud and Forensic Accounting**

*Journal of Forensic Accounting*

*Journal of Forensic Economics*

*Journal of Fraud Studies (forthcoming)*

### **Case Studies**

ACFE Educator Reference Material for members.

Beasley, Mark S., Frank A. Buckless, Steven M. Glover, and Douglas F. Prawitt. *Auditing Cases: An Active Learning Approach, Second Ed.* Upper Saddle River, NJ: Prentice Hall, 2002.

Cases on auditing, fraud and forensic accounting published in *Issues in Accounting Education*.

Cullinan, Charles P., and Gail B. Wright. *Cases from the SEC Files: Topics in Auditing*. Upper Saddle River, NJ: Prentice Hall, 2003.

### **Organizations**

American College of Forensic Examiners (Certified Forensic Accountant)

American Institute of Certified Public Accountants  
AICPA Consulting Standards in Litigation Engagements  
Antifraud & Corporate Responsibility Resource Center  
Business Valuation and Forensic & Litigation Services

Association of Certified Fraud Examiners

Association of Government Accountants

Committee of Sponsoring Organizations (COSO)

*Report of the National Commission on Fraudulent Financial Reporting*  
(1987)

*Internal Control—Integrated Framework* (1992)

*Fraudulent Financial Reporting: 1987-1997, An Analysis of U.S. Public Companies* (1999)

*Enterprise Risk Management—Integrated Framework* (2004)

Forensic Accounting Society of North America

Institute of Internal Auditors

IT Governance Institute

Information Systems Audit and Control Association (ISACA)

National Association of Certified Valuation Analysts

National Association of Corporate Directors

National Litigation Support Services Association

Network of Independent Forensic Accountants (England)

Professional Liability Underwriting Society (PLUS)

Risk & Insurance Management Society (RIMS)

## Appendix B

### Fraud Acts

In general, students should be familiar with the typical fraudulent acts listed below. Most fraud and forensic accounting professionals suggest that familiarization with the various fraudulent acts is sufficient exposure and that entry-level professionals do not need to understand all of the complexities and nuances of each type of fraud. Course and curriculum developers should place the bulk of their emphasis and material coverage on those areas outlined above. Based on student employment opportunities, instructors may want to explore some of the fraud acts listed below in detail as examples of how to prevent, deter, detect, investigate, and remediate fraudulent activity.

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#### Fraud Acts

##### Asset Misappropriation

###### Cash

- Larceny (theft)

- Skimming (removal of cash before it hits books): Sales, A/R, Refunds, and Other

###### Fraudulent Disbursement

- Billing Schemes - including shell companies, fictitious vendors, and personal purchases

- Payroll Schemes - ghost employees, commission schemes, workers compensation, and false hours and wages

- Expense Reimbursement Schemes - including overstated expenses, fictitious expenses, and multiple reimbursements

- Check Tampering

- Register Disbursements - including false voids and refunds

###### Inventory and Other Assets

- Inappropriate Use

- Larceny (theft)

##### Corruption

- Conflicts of Interest (unreported or undisclosed)

- Bribery

- Illegal Gratuities

- Economic Extortion

##### False Statements

- Fraudulent Financial Statements

- False Representations (e.g., employment credentials, contracts, identification)

##### Specific Fraud Contexts

- Bankruptcy Fraud

- Contract and Procurement Fraud

- Money Laundering

- Tax Fraud

- Investment Scams

- Terrorist Financing

- Consumer Fraud

- Identity Theft

- Check and Credit Card Fraud

- Computer and Internet Fraud

- Divorce Fraud (including hidden assets)

- Intellectual Property

- Business Valuation Fraud

##### Noteworthy Industry-Specific Fraud

- Financial Institutions

- Insurance Fraud

- Health Care Fraud

- Securities Fraud

- Public Sector Fraud

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## **Appendix C**

### **Taxonomy of Financial Statement Fraud Types**

The taxonomy below forms the basis of Bonner, Sarah E., Zoe-Vonna Palmrose, and Susan M. Young, "Fraud Type and Auditor Litigation: An Analysis of SEC Accounting and Auditing Enforcement Releases," *The Accounting Review* 73 (4) (October 1998): 503–532. Some frequency data are also available.

#### **A. *Fictitious or overvalued revenues and assets***

1. Sales not based on firm orders to buy (made up).
  - (a) Invoices to phony companies.
  - (b) Phony invoices to legitimate companies.
  - (c) Supporting invoices.
2. Shipments made to customers for non-ordered goods or on canceled or duplicate orders.
3. Shipments made to warehouse or other intermediary location without instruction by customer.
4. Recording refunds from suppliers as revenue.
5. Recognizing customer and contract deposits as completed sales.
6. Factoring receivables and crediting income instead of receivables.
7. Crediting receivables collections to income instead of reducing receivables.
8. Failing to mark down discounts when sale is made (just recording gross sales).
9. Failing to record (actual or estimated) returns as reduction of sales and receivables (either not recording at all or debiting wrong thing).
10. Barter transactions—earnings process is complete, but income is recorded when it shouldn't be.
11. Crediting gross proceeds from sale of assets, e.g., real estate or marketable securities, to income instead of part to asset account and only remainder to income.
12. Continuing to accrue interest income/receivable on nonperforming loans.
13. Frauds to support fictitious sales and receivables.
14. Other fictitious or overvalued revenues and assets.

*B. Premature revenue recognition*

1. Shipments made to customers after end of period and recognized as sales this period (books held open).
2. Sales billed to customers prior to delivery and held by the seller (“bill and hold”).
3. Recording revenues when customer’s obligations to pay depends on receipt of financing from third party.
4. Recording revenues when customer’s obligations to pay depends on resale to third party (consignment sales).
5. Recording revenues when future services or continuing vendor involvement are still due (including franchise fees).
6. Recording revenues when customer’s obligation to pay depends on final acceptance following evaluation period (customers have right of return).
7. Sales in which substantial uncertainty exists about collectibility or seller’s ability to comply with performance guarantees.
8. Shipments to and held by a freight forwarder pending return to company for required customer modifications.
9. Sales of merchandise shipped in advance of the scheduled shipment date without customer’s agreement (ordered, but shipped early—not at year end).
10. Pre-invoicing of goods in process of being assembled.
11. Partial shipments, but recorded as complete sales.
12. Overestimating percentage complete in contracts to book more income than appropriate.
13. Fee income for receivables collection recognized prematurely.
14. Holding cash sales records open beyond year end.
15. Recording revenue on long-term contracts in accordance with billing provisions rather than on the basis of percentage of completion of performance.
16. Equity participating in projects improperly accounted for as loans.

17. Recording income on exchange of similar assets.
18. “Wash sales” (inappropriate gain recognition/loss avoidance on near-simultaneous sale and repurchase of securities).
19. Recognizing NOL carry-forwards when not appropriate.
20. Other premature revenue recognition.

C. *Misclassifications*

1. Failing to segregate unusual and nonrecurring gains or losses from recurring income.
2. Misclassification of fixed and other assets.
3. Combining restricted cash accounts with unrestricted cash accounts.
4. Reclassification of long-term investments as short-term securities.
5. Misclassification of receivables in any way.
6. Misclassification of expenses.
7. Misclassification of debt.
8. Other misclassifications.

D. *Fictitious assets and/or reductions of expenses/liabilities*

1. Fictitious inventory—empty boxes or “hollow squares” in stacked goods.
2. Mislabeled boxes of inventory as being “real” inventory when they contain scrap, obsolete items, or lower value materials.
3. Consigned inventory, rented inventory, or traded-ins for which credits have not yet been issued counted as inventory.
4. Increasing the inventory counts for items/locations the auditor did not count.
5. Overstating inventory in transit between locations.
6. Physically moving inventory and counting it at two locations.



7. Including in inventory merchandise recorded as sold but not yet shipped.
8. Arranging for false confirmation of inventory held by others.
9. Reconciling physical inventory amounts to falsified amounts in G/L.
10. Fictitious fixed assets—purchases made up or sales not removed.
11. Outstanding checks included in balance of cash.
12. Kiting—moving cash from one bank to another and recording the deposit but not the withdrawal.
13. Other fictitious assets and/or reductions of expenses/liabilities.

*E. Overvalued assets and undervalued expenses/liabilities*

1. Inadequate allowance for bad debts/loan loss reserve.
2. Overvalued inventory (inadequate obsolescence reserve)—mechanically overvalued by altering aging, ignoring signs of obsolescence, etc.
3. Diluted inventory—physically overvalued.
4. Capitalization of expenses into inventory.
5. Overstating the stage of completion of work in process of constructed assets.
6. Inadequate allowance for impairment of value in fixed assets.
7. Not writing down investments.
8. Closing cash disbursements records before year end for disbursements where expenses are debited.
9. Lowering dollar value of beginning inventory.
10. Showing PPE at appraised value instead of cost.
11. Allocating too much of total purchase price in a merger to fixed assets.
12. Not recognizing inventory markdowns in calculation of retail inventory.
13. Classifying permanent markdowns in retail inventories as point of sale markdowns.

14. Overstatement of costs of already existing inventory.
15. Failure to record valuation allowance on deferred tax assets.
16. Capitalization of expenses into fixed assets.
17. Overvalued intangibles.
18. Overvalued R & D.
19. Prepaid advertising and other expenses overvalued.
20. Other overvalued assets and undervalued expenses/liabilities.

*F. Omitted or undervalued liabilities (affecting expenses or assets)*

1. Reporting revenue/equity rather than a liability when cash is received.
2. Failing to accrue expected or contingent liabilities for litigation, tax disputes.
3. Unrecorded liabilities for inventory purchases.
4. Underaccrued commission liability.
5. Underaccrued warranties.
6. Other omitted or undervalued liabilities.

*G. Omitted or improper disclosures*

1. Failure to disclose warranty costs and liabilities, other contingencies (e.g., purchase commitments).
2. Inadequate disclosure of impairment in value of equity securities, fixed assets.
3. Improper disclosure of management perks.
4. Improper accounting for discontinued operations.
5. No disclosure of technical default or financial distress.
6. No disclosure of change in accounting principle.

7. Problems with disclosures in MD&A.
8. Operating data disclosure problems.
9. Accounting information disclosure problems.
10. Accounting policy disclosure problems.
11. Other omitted disclosures in FN.

*H. Equity frauds*

1. Using purchase instead of pooling.
2. Inappropriate valuation of assets received in exchange for stock.
3. Treating loans from principals as equity.
4. Hiding income or expenses in equity.
5. Other equity frauds.

*I. Related party transactions*

1. Fictitious sales to related parties.
2. Less-than-arm's-length transactions (premature or overvalued).
3. Reporting revenue/equity rather than a liability when cash is received.
4. Disclosure problems.
5. Other related party frauds.

*J. Frauds going the "wrong way"*

1. Shifting revenues to a later period.
2. Writing off future years' depreciation or amortization.
3. Recording reorganization costs in one lump sum (or accelerating recording).
4. Charging a fixed asset to expense.

5. Omitting inventories or other assets.
6. Overstating liabilities.
7. Overstating bad debt expense.
8. Overstating other discretionary expenses.
9. Pooling (instead of purchase) with subsequent gains on sale of undervalued assets.
10. Altering LIFO pools to undervalue inventory.
11. Other frauds going the "wrong way."

*K. Illegal acts*

1. Kickbacks.
2. Embezzlement.
3. Disclosure problems.
4. Other illegal acts.

*L. Miscellaneous*

1. Consolidation issues.
2. Inter-company transactions.
3. Other.

## **Appendix D**

### **Implementation Guide for the Model Curriculum for Fraud and Forensic Accounting**

To obtain an implementation guide for the model curriculum, please send an email to [FFAModel@mail.wvu.edu](mailto:FFAModel@mail.wvu.edu). The implantation guide provides a table-by-table outline that allows users to designate where in courses/programs the suggested material is located.

## **Appendix E**

### **Example Implementation of the Model Curriculum for Fraud and Forensic Accounting**

The implementation of the model curriculum at West Virginia University (WVU) will be used as an example implementation. In summer 2003, WVU embarked on its journey to develop a graduate “certificate program” in fraud and forensic accounting. Initial searches for best practices revealed that programs were being initiated at various institutions around North America under various names and with various structure and course content. In response, through its Forensic Science Initiative, WVU contacted the National Institute of Justice about the possibility of developing a model curriculum for fraud and forensic accounting. In the fall of 2003, WVU put course content and proposed course syllabi together for four courses to be included in a graduate certificate program. These syllabi also facilitated WVU Senate approval and detailed course development that started in earnest in January 2004.

On March 25-26, 2004, co-chairs of this activity and WVU professors, Dr. Bonnie Morris and Dr. Richard (Dick) Riley, met with representatives of the TWG Planning Panel. As a result of those meetings, significant modifications were made to the course content of the WVU fraud and forensic accounting curriculum. The 4-course graduate certificate program was then delivered in summer 2004 with 18 students successfully completing the program.

Based on the efforts of the TWG Planning Panel and WVU’s course delivery experience, the co-chairs prepared discussion material and a straw man model curriculum for a meeting of the 46 members of the TWG on October 1, 2004. Based on feedback from that activity and meeting summaries, the first draft of this document was created. This document was vetted at a TWG Planning Panel meeting on March 21, 2005. As a result of these activities, WVU again revised and refined its graduate certificate course offerings for delivery in summer 2005. In summer 2005, as part of the NIJ grant activity, WVU prepared two one-week courses and delivered those courses to practicing professionals as a “proof of concept” of the model curriculum. Finally, based on course delivery in summer 2005 and feedback from the TWG, the model curriculum included in this document was again modified in fall 2005.

Because WVU’s program has been developed independently but has reaped the benefits of being developed in parallel with this model curriculum, it will be used as an example implementation. To obtain the example implementation of the model curriculum, please send an email to [FFAModel@mail.wvu.edu](mailto:FFAModel@mail.wvu.edu).