**FLORIDA ATLANTIC UNIVERSITY**

**Graduate Programs—NEW COURSE PROPOSAL**

**DEPARTMENT:** SCHOOL OF ACCOUNTING  
**COLLEGE:** COLLEGE OF BUSINESS

**RECOMMENDED COURSE IDENTIFICATION:**

PREFIX _____ACG____  COURSE NUMBER __6498_____  LAB CODE (L or C) __________
(TO OBTAIN A COURSE NUMBER, CONTACT kheman@fau.edu)

COMPLETE COURSE TITLE: Advanced Digital Forensics in Forensic Accounting

**CREDITS:** 3

**TEXTBOOK INFORMATION:**


**GRADING (SELECT ONLY ONE GRADING OPTION):**  
REGULAR ____X____ SATISFACTORY/UNSATISFACTORY ______

**COURSE DESCRIPTION, NO MORE THAN THREE LINES:**

This course introduces students to professional accounting engagements involving the application of computer forensics to the discovery, acquisition, analysis, and reporting of digital evidence. Emphasis is placed on gaining knowledge of and proficiency in using software tools and General Audit Software (GAS) as part of the investigation and case management processes.

**PREREQUISITES**: ENROLLMENT IN SCHOOL OF ACCOUNTING EXECUTIVE PROGRAMS AND ACG 6586, ACCOUNTING FRAUD EXAMINATION CONCEPTS (3 CREDIT HOURS)

**COREQUISITES**:  

**REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)**:  
ACCOUNTING, BUSINESS, GRADUATE

---

**MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE:** Academically or Professional Qualified to teach masters level accounting courses

Faculty contact, email and complete phone number:  
George Young, Ph.D.  
gyoung3@fau.edu  
954-236-1195

Please consult and list departments that might be affected by the new course and attach comments. Information Technology and Operations Management (see attached)

---

**Approved by:**  
Department Chair: [Signature]  
College Curriculum Chair: [Signature]  
College Dean: [Signature]  
UGPC Chair: [Signature]  
Graduate College Dean: [Signature]  
UFS President:  
Provost:  
**Date:**  
9/6/13  
10/23/13  
11/20/13  
**Date:**

1. Syllabus must be attached; see guidelines for requirements:  

2. Review Provost Memorandum:  
Definition of a Credit Hour  
www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf

3. Consent from affected departments (attach if necessary)

Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

FAUnewGrad—Revised September 2012
School of Accounting  
College of Business  
Florida Atlantic University

Justification for Offering Proposed Course, “ACG 6498 Advanced Digital Forensics in Forensic Accounting”

A major responsibility of forensic accountants is to investigate fraud and collect evidence for civil and criminal trials. In the vast majority of cases, the evidence is in digital format residing in computerized systems. As a result, essential knowledge and skills for forensic accountants include systematic approaches to acquiring, cataloging, and presenting computerized and digital data in a manner sufficient to meet the rigorous standards that courts require for admissibility in evidentiary proceedings. Digital data exists in many different types of systems, and especially in accounting information systems in business environments. Forensic accountants are in a unique position to investigate frauds in computerized accounting systems.
RE: Advanced Digital Forensics in Forensic Accounting
Tamara Dinev

Sent: Wednesday, August 28, 2013 6:54 PM
To: George Young
Cc: whopwood@whopwood.com

Hi George:

Thank you for contacting me. I think we went through that last Spring when you guys intended to go through the Grad Council. I am reiterating that I have no objection to creating the courses since it very clearly serves only the Accounting executive programs and requires a graduate accounting prerequisite.

Best Regards:
Tamara

Tamara Dinev, Ph.D.
Department Chair and Professor
Department of Information Technology and Operations Management
College of Business
Florida Atlantic University
Boca Raton, Florida 33431
OFFICE: Fleming Hall, 219
TEL: (561) 297-3181
FAX: (561) 297-3043
e-mail: tdinev@fau.edu

From: George Young
Sent: Wednesday, August 28, 2013 3:36 PM
To: Tamara Dinev
Cc: whopwood@whopwood.com
Subject: Advanced Digital Forensics in Forensic Accounting

Hello Tamara,

During the fall 2012 semester, I discussed with you the prospect that the School of Accounting would like to offer a computer forensics course. At that time, you said you saw no difficulty with us offering the course as long as the course is offered exclusively to the School of Accounting Executive Program students and that this exclusivity is reflected in the course prerequisites and that the title reflects the fact that this course is serving accounting forensic students. You said that the title should be something along the lines of “Computer Forensics for Accountants” or something similar.

You wanted to see the course syllabus to determine whether the prerequisites were sufficiently restrictive to meet your expectations. I have attached the syllabus and the FAU new grade course form that we hope to submit to the appropriate committees for their approval. The course is named "Advanced Digital Forensics in Forensic Accounting" and the temporary number assigned to it is ACG 6498.

Do you have any objections to the School of Accounting offering this computer forensics course?

Thank you for your consideration of this matter, Tamara.

Regards,

George

https://exchange.fau.edu/owa/?ae=Item&t=IPM.Note&id=RgAAAAAiFlLgUOQaen0O... 8/28/2013
George Young, Ph.D., CFE, CPA
Associate Professor
Academic Director of
School of Accounting Executive Programs
  Master of Accounting (Forensic Accounting Concentration)
  Master of Accounting (Business Valuation Concentration)
  Master of Tax
College of Business
Florida Atlantic University
(954) 236-1195
Advanced Digital Forensics in Forensic Accounting
(Three credit hours)
Tentative Course Syllabus
[Semester and Year]
[Location of Class]
[Day and Time of Class]

Professor Information
Name
Office Address
E-mail Address
Phone Number

Office Hours

Required Text and Materials


Recommended Text

Software
ACL (http://www.acl.com/): ACL is a General Audit Software (GAS) used world-wide by accountants.

EnCase® Forensic V7 (http://www.guidancesoftware.com/forensic.htm): EnCase® Forensics for forensic practitioners who need to conduct efficient, forensically sound data collection and investigations using a repeatable and defensible process. EnCase® Forensic lets examiners acquire data from a wide variety of devices, unearth potential evidence with disk level forensic analysis, and craft comprehensive reports on their findings, all while maintaining the integrity of their evidence.

ProDiscover Basic
(http://toorcon.techpathways.com/uploads/ProDiscoverRelease7200Basic.zip)

Course Description
This course introduces students to professional accounting engagements involving the application of computer forensics to the discovery, acquisition, analysis, and reporting of digital evidence. Emphasis is placed on gaining knowledge of and proficiency in using software tools and General Audit Software (GAS) as part of the investigation and case management processes.

The culmination of the computer forensic knowledge and skills is applied to expert testimony in the context of ethical responsibilities and professional conduct of forensic accountants.

Course Prerequisites and Credit Hours
Prerequisites: Enrollment in School of Accounting Executive Programs and ACG 6686, Accounting Fraud Examination Concepts (3 credit hours).

According to Florida State Statute 6A-10.033, students must spend a minimum 2,250 minutes of in class time during a 3-credit course. Additionally, students enrolled in a 3-credit course are expected to spend a minimum of 4,500 minutes of out-of-class-time specifically working on course-related activities (i.e., reading assigned pieces, completing homework, preparing for exams and other assessments, reviewing class notes, etc.) and fulfilling any other class activities or duties as required.

Course Learning Objectives
After completing this course students will be able to
1. Explain the issues addressed by computer forensics.
2. Explain how to set up an investigation involving computer forensics.
3. Explain the different types of digital forensics investigations.
4. Identify the key factors in setting up a computer forensics lab.
5. Acquire and validate digital evidence under a wide range of typical scenarios.
6. Explain how to process incident and crime scenes.
7. Conduct investigation involving various types of data sources, including accounting systems, text files, email, and various types of documents and files.
8. Process and analyze forensic digital evidence with various operating systems.
9. Identify the major functions of widely-used computer forensic software platforms.
10. Recover various types of files, including those that are encrypted.
11. Conduct an investigation in a virtual machine environment.
12. Conduct investigations using many types of hardware, including mobile devices
13. Develop effective reports and give expert testimony

Course Evaluation Method
Grading: There will be a total of 100 points available:

<table>
<thead>
<tr>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Paper</td>
<td>25</td>
</tr>
<tr>
<td>Discussion Threads</td>
<td>15</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25</td>
</tr>
<tr>
<td>Participation in Group Assignments</td>
<td>15</td>
</tr>
<tr>
<td>Individual Assignments</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>D</td>
<td>63-66</td>
</tr>
<tr>
<td>D-</td>
<td>60-62</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

The point scale (above) will be used to weight individual items that contribute to the total course grade. For example, if the maximum score for the final exam is 140 points, then this score will be weighted 25% (25/100) towards the total course grade.

Important dates
Last day to drop a course without receiving a “W” (fee liable) is mm/dd/yy.
Last day to drop a course without receiving an “F” (fee liable) is mm/dd/yy.

(Note: These dates are furnished for your convenience; if you are contemplating dropping a course, you are responsible for confirming the accuracy of these dates with the SOAEP staff.)

Additional Course Policies

Missing Exams
A make-up exam will be given for valid reasons (medical emergency, family emergency, university-scheduled events, religious observation, or class conflicts) consistent with University
policy and the professor's discretion. If you do not have a valid reason for missing an exam, a zero grade may be assigned.

**Late Assignment**
The semester project submitted after the stated due date will receive a zero grade.

**Attendance Policy**
Students are expected to attend/view all course lectures and participate in all eCollege discussion boards.

**Incompletes**
There are no incompletes for this course except in the case of extraordinary circumstances (for example, excessive absences due to severe illness). The professor determines when an incomplete is appropriate.

**Points Awarded**
It is the responsibility of the student to monitor the points awarded to-date in eCollege. The student has up to two weeks following the posting of any points to contest the number of points, after which the points are considered final.

**Electronic Communication**
eCollege and FAU email will be used in this course for content delivery, assignments, and other communications. Accordingly, it is the student's responsibility to check the eCollege course site and their FAU email account for announcements, etc. I will do my best to respond to your course-related questions within 24-48 hours. I may post answers to questions on eCollege rather than individual responses if I believe that answers will benefit members of the class.

**Term Paper**
The term paper will be on any topic covered in the class discussion or in the text. No approval for your topic is required. Generally speaking, the maximum length permissible will be 10 typewritten pages, double-spaced with standard margins and a 12-point proportional font, including tables, figures, exhibits, and bibliography, and appendices. The cover page does not count towards the page limit. Towards the end of the semester I will announce instructions for submitting your paper. You should follow the specific instructions I post on in eCollege, and instructions that I post in eCollege will have precedence over those given here.
Grading of Term Papers

General Style (30%)
- visual appeal, format
- spelling
- uniformity and consistency
- grammar

Content (70%)
- Scope/organization, originality
- Currentness and interest

Total (100%)

Format

All projects, cases, term papers, and other documents must be submitted according to the electronic format that will be announced later in the semester.

Discussion Threads
The ability to interact in a meaningful manner and convey relevant information efficiently with colleagues is a critical component of success, regardless of your particular career objectives. Communication is a skill, and may therefore be learned and improved with practice. In an effort to provide you with a relatively low-cost venue and high-benefit incentive for developing these skills a portion of your grade in this class is based on participation points related to your discussion posting. It is expected that everyone will post responses to each individual discussion board topic in a timely manner. Simply put, you cannot wait until the end of the semester to make all of your posts.

Exam
The exam focuses on the valuation concepts illustrated during the semester. The exam is designed to evaluate your understanding of the concepts. The exam format may include multiple choice, problems, essay, and short answer.

Important Notes

- It is essential that you keep your email address up to date in your eCollege AND discussion board profiles. (See below for information on the discussion board) You will be responsible for announcements sent to both these addresses.
If you change your email address in the discussion board, you will receive an automated message at your OLD email address. Until you respond to the automated message you won't be able to access the discussion board. Please remember this if you change your email address in the discussion board.

If at any time the discussion board is down from more than 12 hours, you should visit this website for further information. Don't be concerned if the discussion board is down for a few hours. Lesson closing dates will be automatically extended for any prolonged outages that occur on Sunday evenings. If you are unable to post to the discussion board, either because of an outage or because the lesson is closed, please do not email your comments to me. This is because it's a discussion, not homework, and discussions can only take place in a group.

Assigned Text Readings
This text readings schedule is approximate and subject to any changes needed to adapt to the progress of the class. You will also be assigned articles each week to discuss in eCollege threaded discussions.

Supplemental lectures
Supplemental lectures will be available via eCollege archives and are an integral part of this course. Students are expected to view these supplemental lectures in addition to the regular class lectures on the course schedule. The topics and timing of these supplemental lectures will be distributed in class or eCollege.

Problems using eCollege, Accessing Videos, and other Technology Problems
The School of Accounting Executive Programs maintains an information technology help desk dedicated exclusively to its executive students. The help desk is staffed by several full-time IT Professionals and is open 8:00 to 5:00 on weekdays and during limited hours on the weekends, according to the schedule published at http://help.schoolofaccounting.com/content.php?123-SOAEP-IT.

Please report all technical issues directly to http://helpdesk.schoolofaccounting.com.

Please do not report technical issues to your course professors or to any of our staff by email or other means outside of http://helpdesk.schoolofaccounting.com, as this will only cause a significant delay in your getting help.

Professors do not provide technical support for eCollege, course video, or other IT services. Emailing your professor (or other person) will likely add a long delay in your getting help. If you
email your professor about a problem, it might take a couple of days before your professor forwards your message to one of the IT staff professionals. The IT staff professional might be out of office and not receive the forwarded email message for a couple more days. Then, when the IT professional person does receive your email message, he or she will have to contact you and manually create a support ticket. The entire process could take up to a week or longer. On the other hand, if you instead submit your report or request directly to http://helpdesk.schoolofaccounting.com, a support ticket will automatically be created, and an email copy of your request will instantly be sent to the IT staff professional on duty at the time. During normal business hours, your request will immediately be delivered to all 3 full-time IT professionals. Further, you will receive an immediate email response that contains a login ID and password that you can use to track progress relating to your issue.

Some typical IT problems served by http://helpdesk.schoolofaccounting.com

1. You can’t login to eCollege
2. You are having problems within eCollege
3. You have problem viewing or hearing a class video
4. You are having a problem submitting an online quiz

During Saturday live lectures, you can be connected directly to the video engineer for your live classroom by visiting and clicking on the Live Support Button. This is the simplest and fastest way to get help during live lectures for lecture-related problems.

Etiquette Policy
To foster a more professional learning environment and to develop habits that lead to success in the business work, all participants must engage in professional behavior.

Anti-plagiarism Software
Written components of any assignment or project may be submitted to anti-plagiarism software to evaluate the originality of the work. Any students found to be submitting work that is not their own will be deemed in violation of the University’s honor code discussed herein.
### Tentative Course Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic(s)</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1    | a. Computer Forensics and the Accounting Profession  
      b. Computer Forensics Investigations - Overview  
      c. Professional Accounting Conduct | Text (NPS) Chapter 1 Weekly |  |
| 2    | a. Preparing Investigations  
      b. Case Management  
      c. Types of Cases (e.g., employee termination, industrial espionage)  
      d. Computer Forensics Software  
      e. Conducting Investigations | Text (NPS) Chapter 2 |  |
| 3    | a. The Accountant’s Resource Requirements  
      b. Lab Certification Requirements  
      c. The Forensic Workstation | Text (NPS) Chapter 3 |  |
| 4    | a. Data Acquisition  
      b. Validating Acquired Data  
      c. Acquisition Tools | Text (NPS) Chapter 4 |  |
| 5    | a. Processing Crime and Incident Scenes  
      b. Evidence Collection in Private-Sector Scenes  
      c. Evidence Collection in Law Enforcement Scenes  
      d. Searching, Securing, Seizing, and Retaining Digital Evidence  
      e. Sample Cases | Text (NPS) Chapter 5 |  |
| 6    | a. Working with Operating Systems  
      b. File Systems  
      c. Encryption Schemes  
      d. Registries  
      e. Startup Tasks  
      f. Virtual Machines | Text (NPS) Chapter 6 |  |
| 7    | a. Digital Forensics Tools  
      b. Evaluating Tools  
      c. Hardware Tools (e.g., write blockers)  
      d. Software Validation Protocols | Text (NPS) Chapter 7 |  |
| 8    | a. OS-dependent File Systems  
      b. Partition Schemes | Text (NPS) Chapter 8 |  |
| 9    | a. Forensics Data Analysis and Validation  
      b. Determining what Data to Collect and Analyze  
      c. Validating Forensic Data  
      d. Identifying Hidden Data | Text (NPS) Chapter 9 |  |
### Selected University and College Policies

**School of Accounting Policies**
You are responsible for School of Accounting policies at http://business.fau.edu/departments/accounting/school-of-accounting-policies/index.aspx. **These policies are considered to be an integral part of this syllabus.**

**Code of Academic Integrity Policy Statement**
Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.
Disability Policy Statement
In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD)—in Boca Raton, SU 133 (561-297-3880); in Davie, LA 203 (954-236-1222); or in Jupiter, SR 139 (561-799-8698)—and follow all OSD procedures.

Religious Accommodation Policy Statement
In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs with regard to admissions, registration, class attendance and the scheduling of examinations and work assignments. For further information, please see Academic Policies and Regulations.

University Approved Absence Policy Statement
In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student’s responsibility to notify the course instructor at least one week prior to missing any course assignment.

College of Business Minimum Grade Policy Statement
The minimum grade for College of Business requirements is a “C”. This includes all courses that are a part of the pre-business foundation, business core, and major program. In addition, courses that are used to satisfy the university’s Writing Across the Curriculum and Gordon Rule math requirements also have a minimum grade requirement of a “C”. Course syllabi give individualized information about grading as it pertains to the individual classes.

Incomplete Grade Policy Statement
A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete (“I”). The assignment of the “I” grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete (“I”) grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing (“F”) grade.
Withdrawals
Any student who decides to drop is responsible for completing the proper paper work required to withdraw from the course.

Grade Appeal Process
A student may request a review of the final course grade when s/he believes that one of the following conditions apply:
• There was a computational or recording error in the grading.
• Non-academic criteria were applied in the grading process.
• There was a gross violation of the instructor’s own grading system.
The procedures for a grade appeal may be found in Chapter 4 of the University Regulations.

Disruptive Behavior Policy Statement
Disruptive behavior is defined in the FAU Student Code of Conduct as “... activities which interfere with the educational mission within classroom.” Students who behave in the classroom such that the educational experiences of other students and/or the instructor’s course objectives are disrupted are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor’s expectations for classroom conduct.

Faculty Rights and Responsibilities
Florida Atlantic University respects the right of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions which do not impede their exercise. To ensure these rights, faculty members have the prerogative:
• To establish and implement academic standards
• To establish and enforce reasonable behavior standards in each class
• To refer disciplinary action to those students whose behavior may be judged to be disruptive under the Student Code of Conduct.
Reading List for Proposed Course, “ACG 6498 Advanced Digital Forensics in Forensic Accounting”


Samborn, H. V. (2002). No Place To Hide. *ABA Journal.* (January)


