Digital Forensics and Computer Investigations - AS

Enhanced Comprehensive Academic Program Review 2017-18

Associate in Science Degree: Digital Forensics and Computer Investigations

Certificate: Computer Related Crime Investigation





Academic Effectiveness and Assessment St. Petersburg College



Department of Institutional Research and Effectiveness St. Petersburg College P.O. Box 13489 St. Petersburg, FL 33733 (727) 712-5237 FAX (727) 712-5411 **Enhanced Comprehensive Academic Program Review Produced** by

Digital Forensics and Computer Investigations - AS Program

Kevin Thomas Faculty, *College of Public Safety Administration*

Brian Frank, Ph.D.

Dean, College of Public Safety Administration

Department of Academic Effectiveness and Assessment

Robert Mohr, M.A.

Research Specialist, Academic Effectiveness and Assessment

Joseph Boyd, M.A.

Assessment Coordinator, Academic Effectiveness and Assessment

Magaly Tymms, M.A.

Director, Academic Effectiveness and Assessment

The Board of Trustees of St. Petersburg College affirms its equal opportunity policy in accordance with the provisions of the Florida Educational Equity Act and all other relevant state and federal laws, rules and regulations. The college will not discriminate on the basis of race, color, ethnicity, religion, sex, age, national origin, marital status, pregnancy, sexual orientation, gender identity, genetic information, or against any qualified individual with disabilities in its employment practices or in the admission and treatment of students. Recognizing that sexual harassment constitutes discrimination on the basis of sex and violates this Rule, the college will not tolerate such conduct.

Data and information contained herein cannot be used without the express written authorization of St. Petersburg College. All inquiries about the use of this information should be directed to the Executive Director of Institutional Research and Effectiveness at St. Petersburg College.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Table of Contents

| Executive Summary |
|--|
| SPC Mission Statement |
| Introduction |
| Institutional Effectiveness4Educational Assessment5Program Review Process6 |
| Program Description |
| Degrees Offered8Accreditation8Program Learning Outcomes8 |
| Measure Descriptions |
| Program Performance |
| Actual Course Enrollment 15 Unduplicated Headcount 16 SSH Enrollment 17 Percent Full 18 Course Success 19 Grade Distribution 20 Industry Certification Attainment 21 Internship Enrollment 22 Program Plans Taken by Plan 23 Program Graduates 24 Faculty/Adjunct Ratio 25 Occupation Profile 27 Occupation Description 28 State and County Trends and Wage Information 28 Major Employers 30 Total Placement 31 State Graduates Outcomes 32 |
| Academics |
| Educational Outcomes34 |
| Stakeholder Perceptions |
| Student Survey of Instruction (SSI) |
| Program Action Plan39 |
| References |



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



| Contact Information | 40 |
|---|----|
| Appendix A: Program Outline | 42 |
| Appendix B: Program Assessment Report | 45 |
| Appendix C: 2017 Advisory Committee Minutes and Recommendations | 50 |





Executive Summary

Introduction

The program review process at St. Petersburg College (SPC) is a collaborative effort designed to continuously measure and improve the quality of educational services provided to the community.

Program Description

The number of cybercrimes seems to grow every day: internet fraud, online identity theft; illegal downloading of music and movies. Even crimes that don't use a computer can leave an electronic footprint. SPC's Digital Forensics and Computer Investigations A.S. Degree teaches students how to recover and investigate evidence and material from all kinds of digital devices. Upon completing the program, students will know how to conduct computer research and investigate tools and techniques; track hackers, pedophiles, and internet stalkers; conduct identity theft and internet fraud investigations; and combat computer software piracy and copyright infringement.

Degrees Offered

An Associate in Science Degree in Digital Forensics and Computer Investigations is offered at SPC. A certificate in Computer Related Crime Investigation is also available at SPC.

Program Performance

- Actual Course Enrollment decreased in 2016 (372) from the previous year (475).
- Unduplicated Headcount increased in 2016 (179) from the previous year (171).
- SSH Enrollment decreased in 2016 (1,116) from the previous year (1,425).
- Comparisons between the Fall semesters indicated that the *Percent Full Metric* increased in Fall 2017 (127.3%) from Fall 2016 (113.3%).
- The *course success rate* decreased in 2016 (87.4%) from the previous year (88.6%).
- *Grade Distribution* indicated that over three-quarters of the students (76.6%) received an 'A', 'B' or 'C' during 2016.
- An *Industry Certification* or equivalent state or national exam has not been identified for the Digital Forensics program for evidence of certification attainment at the associate level.
- An *Internship* course has not been identified for the Digital Forensics program at the associate level.
- Program Plans Taken by Plan revealed that almost half of the students who were enrolled in the program during Fall 2015, and had not graduated, remained in the program by Fall 2016. By Fall 2017, almost one-tenth of the original (Fall 2015) students remained in the DIGFORN - AS program. This measure does not display the number of students who graduated during any given term.
- The number of *program graduates* in the DIGFORN AS program increased in 2016 (16) from the previous year (14). The number of *program graduates* in the CRCI CT program decreased in 2016 (15) from the previous year (31).



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



- Fulltime Faculty taught 74.3% of the ECHs in 2016-17 as compared to 73.8% in 2015-16. Adjunct Faculty taught 25.7% of the ECHs in 2016-17 as compared to 26.2% in 2015-16.
- The highest semester for Adjunct ECHs was Fall 2014-15 in which adjunct faculty taught 55.6% of the program's course load. The three-semester average for adjuncts (25.7%) is consistent with the College's general 55/45 Fulltime/Adjunct Faculty Ratio guideline.

Occupation Profile

- One occupation description, Information security analysts, was located in the Florida Department of Economic Opportunity (DEO) website for the Digital Forensics and Computer Investigations - AS program.
- The 2017 median hourly earnings for Information security analysts was \$39.72 in Florida and \$41.35 in Pinellas County.
- Employment trend information for Information security analysts showed an average annual increase (19.9% 20.0%) for the period between 2017 and 2025 across the state and county.
- The *major employers* of the Digital Forensics and Computer Investigations AS graduates are Pinellas County Sheriff's Office, Verizon Wireless, and Raymond James Financial.
- *Total Placement* in the Digital Forensics and Computer Investigations AS program decreased in 2015-16 (56%) from the previous year (100%).
- State Graduates data indicated that fourteen students completed one of two Digital Forensics and Computer Investigations AS programs in 2015-16. Detailed data was limited to the fourteen total completers for SPC, and the placement rate for St. Johns River State College (100%) and SPC (56%).

Academics

- The 2016-17 Academic Program Assessment Report indicated that the desired results were met for all three Program Learning Outcomes (PLOs) assessed in the Digital Forensics and Computer Investigations AS Program.
- The 2016-17 Academic Program Assessment Follow-Up Report has not yet been approved.

Stakeholder Perceptions

- All the individual average content area scores for the *Student Survey of Instruction (SSI)* were above the traditional threshold (an average of 5.0) used by the College for evaluating seven-point satisfaction scales. These results suggest general overall satisfaction with the courses within the Digital Forensics and Computer Investigations AS program; specifically, as they relate to faculty engagement, preparation and organization, and course instruction.
- Twenty-one Recent Alumni surveys were provided to the 2014-15 graduates of the Digital Forensics and Computer Investigations - AS program. One response was received from a Certificate completer. Since a single response cannot accurately represent the entire program, Alumni survey results will not be reported.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



• Employer surveys are sent out based on the permission provided by recent graduates in the 2014-15 recent graduate survey. Since permission was not received from recent graduates, there is no Employer survey information available.

Dean's Perspective: Issues, Trends, and Recent Successes

The major trend in the Digital Forensic area is the emphasis on providing students with the opportunity to complete industry and vendor-based certifications. In an effort to eliminate duplicate courses college wide, and also to align five of the Digital Forensics classes with industry certifications, last year the Digital Forensics program replaced five core courses with five equivalent courses from the CCIT program.

The classes and certifications are as follows:

| OLD COURSE | NEW COURSE FROM CCIT Program | Certification Mapping |
|---|---|--------------------------------------|
| CJE 1660 File Systems Forensic Analysis | CIS 2352 Ethical Hacking | Part 3 of 3 for CompTIA Security+ |
| CJE 1661 Computer Hardware for Forensic Investigators | CET 1171C Computer Repair Essentials | Part 1 of 2 for CompTIA A+ |
| CJE 1665 Investigating Network Intrusions | CIS 1358 Operating System Security | Part 2 of 3 for CompTIA Security+ |
| CJE 1666 Operating Systems for Forensic Investigators | CET 1172C Computer Support Technician | Part 2 of 2 for CompTIA A+ |
| CJE 1678 Intro to Network Security for CRCI | CTS 1120 Introduction to Network Security Foundations | Part 1 of 3 for CompTIA Security+ |

In addition to updating the content of those classes, the higher enrollment rates for the CCIT classes (CIS 2352, CET 1171C, CET 1172C, CIS 1358, and CTS 1120) will improve the equivalent numbers in the Digital Forensics programs.

Recommendations/Action Plan

Program Recommendations and action plans are compiled by the Dean and Program Administrators, and are located at the end of the document.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



SPC Mission Statement

The mission of St. Petersburg College is to promote student success and enrich our communities through education, career development and self-discovery. St. Petersburg College fulfills its mission led by an outstanding, diverse faculty and staff and enhanced by advanced technologies, distance learning, international education opportunities, innovative teaching techniques, comprehensive library and other information resources, continuous institutional self-evaluation, a climate for student success, and an enduring commitment to excellence.

Introduction

In a holistic approach, the effectiveness of any educational institution is the aggregate value of the education it provides to the community it serves. For over eighty-five years, St. Petersburg College (SPC) has provided a wide range of educational opportunities and services to a demographically diverse student body producing tens of thousands of alumni who have been on the forefront of building this county, state, and beyond. This is due, in large part, to the College's institutional effectiveness.

Institutional Effectiveness

Institutional Effectiveness is the integrated, systematic, explicit, and documented process of measuring performance against the SPC mission for the purposes of continuous improvement of academic programs, administrative services, and educational support services offered by the College.

Operationally, the institutional effectiveness process ensures that the stated purposes of the College are accomplished. In other words did the institution successfully execute its mission, goals, and objectives? At SPC, the Department of Academic Effectiveness works with all departments and units to establish measurable statements of intent that are used to analyze effectiveness and to guide continuous quality improvement efforts. Each of St. Petersburg College's units is required to participate in the institutional effectiveness process.

The bottom-line from SPC's institutional effectiveness process is improvement. Once SPC has identified what it is going to do then it acts through the process of teaching, researching, and managing to accomplish



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



its desired outcomes. The level of success of SPC's actions is then evaluated. A straightforward assessment process requires a realistic consideration of the intended outcomes that the institution has set and a frank evaluation of the evidence that the institution is achieving that intent.

There is no single right or best way to measure success, improvement, or quality. Nevertheless, objectives must be established, data related to those objectives must be collected and analyzed, and the results of those findings must be used to improve the institution in the future. The educational assessment is a critical component of St. Petersburg College's institutional effectiveness process.

Educational Assessment

Educational programs use a variety of assessment methods to improve their effectiveness. Assessment and evaluation measures are used at various levels throughout the institution to provide provosts, deans, program managers, and faculty vital information on how successful our efforts have been.

While the focus of a particular educational assessment area may change, the assessment strategies remain consistent and integrated to the fullest extent possible. The focus of Associate in Arts degrees is students continuing on to four-year degree programs. The Associate in Science programs are targeted towards students seeking employable skills, which does not require but may include continuing on to a four-year program. The General Education based assessments focus on the general learning outcomes from all degree programs, while Program Review looks at the viability of the specific programs.

The individual reports unique by their individual nature are nevertheless written to address how the assessments and their associated action plans have improved learning in their program. The College has developed an Educational Assessment Website http://web.spcollege.edu/edoutcomes/ to serve as repository for all SPC's educational outcomes reports and to systematically manage our assessment efforts.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Program Review Process

The program review process at St. Petersburg College is a collaborative effort to continuously measure and improve the quality of educational services provided to the community. The procedures described below go far beyond the "periodic review of existing programs" required by the Florida College System, and exceed the necessary guidelines within the Southern Association of Community Colleges and Schools Commission on Colleges (SACSCOC) review procedures.

State guidelines require institutions to conduct program reviews every seven years as mandated in chapter 1001.03(13) of the Florida Statutes, the State Board of Education (formerly the Florida Board of Education) must provide for the review of all academic programs.

(13) ...CYCLIC REVIEW OF POSTSECONDARY ACADEMIC PROGRAMS.--The State Board of Education shall provide for the cyclic review of all academic programs in Florida College System institutions at least every 7 years. Program reviews shall document how individual academic programs are achieving stated student learning and program objectives within the context of the institution's mission. The results of the program reviews shall inform strategic planning, program development, and budgeting decisions at the institutional level.

In addition, Rule 6A-14.060 (5) states that each community college shall:

(5) ...Develop a comprehensive, long-range program plan, including program and service priorities. Statements of expected outcomes shall be published, and facilities shall be used efficiently to achieve such outcomes. Periodic evaluations of programs and services shall use placement and follow-up data, shall determine whether expected outcomes are achieved, and shall be the basis for necessary improvements.

The recommended program review timeline at SPC is four years and is aligned with the long-standing three-year academic program assessment cycle, producing a coherent and integrated review process. Figure 1



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



represents the relationship between program assessment, program review, and the viability report processes that comprise the academic program assessment cycle.

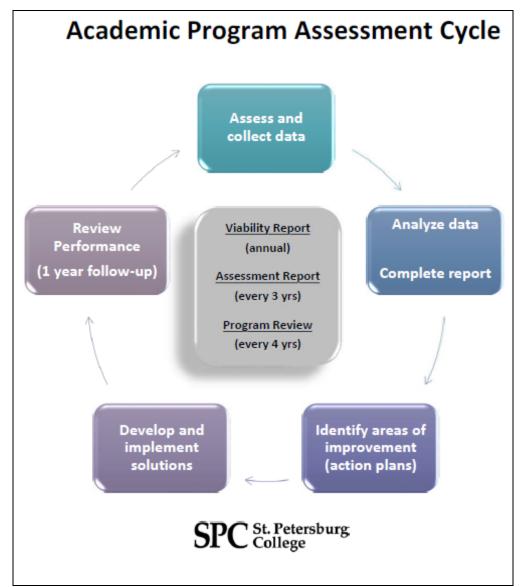


Figure 1: Academic Program Assessment Cycle



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Program Description

The number of cybercrimes seems to grow every day: internet fraud, online identity theft; illegal downloading of music and movies. Even crimes that don't use a computer can leave an electronic footprint. SPC's Digital Forensics and Computer Investigations A.S. Degree teaches students how to recover and investigate evidence and material from all kinds of digital devices. Upon completing the program, students will know how to conduct computer research and investigate tools and techniques; track hackers, pedophiles, and internet stalkers; conduct identity theft and internet fraud investigations; and combat computer software piracy and copyright infringement.

Degrees Offered

An Associate in Science Degree in Digital Forensics and Computer Investigations is offered at SPC. A certificate in Computer Related Crime Investigation is also available at SPC.

For a complete listing of all courses within the Digital Forensics and Computer Investigations Program, please see Appendix A.

Accreditation

No accreditation information is on file for the Digital Forensics and Computer Investigations - AS Program.

Program Learning Outcomes

- 1. Implement critical thinking by: a. successfully completing the clinical prep/plan of care; b. achieving mastery level on a reliable, standardized, valid, commercially prepared Critical Thinking Test.
- 2. Apply knowledge of the use of principles and concepts of therapeutic communication and interpersonal relationships by: a. successfully mastering the Digital Forensics and Computer Investigations IV (NUR 2731C) summative Interpersonal Analysis (IPA) and a reliable, standardized, valid, commercially prepared therapeutic communication skills test.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Measure Descriptions

The CAPR reports include twenty-two measures designed to provide an overview of all the various elements pertaining to the program. The source of the information for nine of the first ten measures is the Program Review CAPR Dashboard in the SPC Pulse/Business Intelligence system. Sources for the remaining measures can be found within their measure description. Measures obtained from SPC Pulse/Business Intelligence were extracted in fall 2017. Each measure is described in detail below.

Measure #1: Actual Course Enrollment (Enrollment Count)

Actual Course Enrollment is the sum of actual student enrollment for the courses within the specified Academic Organization during the selected academic years. This number is a duplicated headcount of students enrolled in the program's courses, and does not reflect the actual number of students enrolled in the program or its associated certificates (if applicable). The filters for the Actual Course Enrollment measure are as follows:

- Academic Year Term Desc Multi: 2013, 2014, 2015, 2016
- Academic Plan Multi: <u>Undergraduate</u>
- College Group Acad Org Subject: <u>Academic Organization</u>
- All other filters: All

Measure #2: Unduplicated Headcount

Unduplicated Headcount is the total number of unduplicated students enrolled in courses within the specified Academic Organization during the selected academic years. The filters for the Unduplicated Headcount measure are as follows:

- Academic Year Term Desc Multi: 2013, 2014, 2015, 2016
- Academic Plan Multi: Undergraduate
- College Group Acad Org Subject: Academic Organization
- All other filters: All

Measure #3: SSH Fnrollment

Student Semester Hours (SSH) Enrollment is defined as the total number of student semester hours in the specified Academic Organization during the selected academic years. The filters for the SSH Enrollment measure are as follows:

- Academic Year Term Desc Multi: 2013, 2014, 2015, 2016
- Academic Plan Multi: Undergraduate
- College Group Acad Org Subject: Academic Organization
- All other filters: All



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Measure #4: Percent Full

The Percent Full metric is the actual enrollment count of the specified Academic Organization divided by the Standard Course Load (SCL) for the selected academic terms. The filters for the Percent Full metric are as follows:

- Academic Year Term Desc Multi: 2016-17 Fall, Spring, Summer; 2017-18 Fall
- College Group Acad Org Subject: Academic Organization
- Class Status: Active, Full, Stop Further Enrollment
- All other filters: All

Measure #5: Course Success (Performance)

The Performance measure is defined as the number of students successfully completing a course with a grade of A, B, or C (success rate), divided by the total number of students enrolled in courses within the Academic Organization during the selected academic years. The filters for the Performance measure are as follows:

- Academic Year Term Desc Multi: 2013, 2014, 2015, 2016
- Academic Plan Multi: Undergraduate
- College Group Acad Org Subject: Academic Organization
- All other filters: All

Measure #6: Grade Distribution

The Grade Distribution measure reports the number of students receiving an A, B, C, D, F, N, W, or WF in courses within the academic program plan during the selected academic years. The filters for the Grade Distribution measure are as follows:

- Academic Year Term Desc Multi: 2013, 2014, 2015, 2016
- Academic Plan Multi: Program Plan
- All other filters: All

Measure #7: Industry Certification Attainment

The Industry Certification Attainment measure reports the number of students in the program plan that have attained an industry certification or have passed a licensing exam. Source: SPC Factbook, Table 9; Workforce database of student certifications.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Measure #8: Internship Enrollment (Course Groups)

The Internship Enrollment measure reports the number of students enrolled in clinical, practicum, or internship courses within the program plan during the selected academic years. The filters for the Internship Enrollment measure are as follows:

- Academic Year Term Desc Multi: <u>2015-16 Fall, Spring,</u>
 Summer; 2017-18 Fall
- Academic Plan Multi: Program Plan
- All other filters: <u>All</u>

Measure #9: Program Plans Taken by Plan

The Program Plans Taken by Plan measure reports the number of students in the specified program plan in a selected cohort (by Term) that have continued in the plan, and the number of students that have since transferred to other plans, for the selected academic terms or years. The filters for the Program Plans Taken by Plan measure are as follows:

- Student Cohort Student Term History Academic Year-Term Desc: 2015-16 Fall
- Enroll History Acad Term Desc (must be same as above): 2015-16 Fall
- Student Term History Academic Plan: <u>Applicable Program</u> plan
- Comparison Filters
 Academic Year Term Desc Multi: 2015-16 Fall, Spring,
 Summer; 2016-17 Fall, Spring, Summer; 2017-18 Fall
- All other filters: All

Measure #10: Graduates

The Graduates measure depicts the total number of graduates within specified program plan(s) associated with the Academic Organization, for the selected academic years. The filters for the Graduates measure are as follows:

- Academic Year Term Desc Multi: 2013, 2014, 2015, 2016
- Graduation Degree Plan Subplan Multi: <u>All Applicable</u> Program Plans
- All other filters: All



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Measure #11: Faculty/Adjunct Ratio

The Faculty/Adjunct Ratio measure reports the number and percentage of program equated credit hours (ECHs) taught by the individual faculty classifications. Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S_FACRAT).

Measure #12: Revenue and Expenses (will be available by December 2019)

Measure #13: Capital Expenditures (will be available by December 2019)

Measure #14: State and County Trends and Wage Information

Employment trend information is reported by state and county. Jobs (2017) refers to the average annual job openings due to growth and net replacement; % Change (2017-2025) depicts the percent change in the number of annual job openings during the eight-year period; and Median Earnings refers to the average earnings for the specified job title. Source: Florida Department of Economic Opportunity (DEO) http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections

Measure #15: Major Employers

Major employers consist of the primary local employers of SPC graduates. These names are obtained from the Recent Alumni Survey Report and Program Administrators.

Measure #16: Total Placement

Total Placement is the percentage of students who have enlisted in the military, are continuing their education, or are employed in their field within the first year of graduation. Source: FETPIP Florida College System Vocational Reports http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml.

Measure #17: State Graduates Outcomes

State graduates outcomes provide reference data for the employment trend data. Specifically, data on former students and program participants who have graduated, exited or completed a public or training program within the State of Florida are documented. Source: FETPIP Florida College System Vocational Reports http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml.

Measure #18: Educational Outcomes

End-of-program assessment data that are reported in the program's most recent Academic Program Assessment Report (APAR) are summarized and reported with



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



the program's learning outcomes, means of assessment, and information about the program's next assessment report.

Measure #19: Three-Year Course Review (will be available by December 2019)

Measure #20: Student Survey of Instruction

The Student Survey of Instruction (SSI) is electronically distributed to all students enrolled in traditional classroom sections, lab courses and self-paced or directed individual study, and online courses at the College. The purpose of the SSI is to acquire information on student perception of the quality of courses, faculty, and instruction, and to provide feedback information for improvement.

Measure #21: Recent Alumni Survey

Recent alumni surveys are administered to measure alumni satisfaction with SPC's education programs. The Recent Alumni Survey collects information related to career preparation, preparation for continuing education, and the current employment information and educational status of former students. Recent Alumni are surveyed six months after they graduate from SPC.

Measure #22: Employer Survey

Employer surveys are used to measure employer satisfaction with SPC graduates. Employers evaluate graduates from Bachelor of Science/Bachelor of Applied Science (BS/BAS), Associate in Science/Associate in Applied Science (AA/AS), and certificate programs. Surveys are sent to employers of recent graduates annually each spring semester.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Program Performance



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness

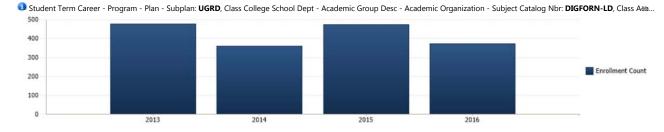
Robert Mohr III -

Newsfeed OneDrive Sites

SharePoint

Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan

Enrollment Count Graph



Enrollment Count

📵 Student Term Career - Program - Plan - Subplan: UGRD, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: DIGFORN-LD, Class A&a...

| Term Academic Year - Term Desc | Enrollment Count |
|--------------------------------|------------------|
| ▶ 2013 | 478 |
| ▶ 2014 | 359 |
| ▶ 2015 | 475 |
| ▶ 2016 | 372 |

Student System Cube Refresh

Last Refresh: 2/12/2018 5:24:16 AM

CAPR Process Document

CAPR Process Document

Academic Year - Term Desc - Multi 2013, 2014, 2015, 2016 ▼

Campus Description All

Academic Plan - Multi All •

College - Group - Acad Org - Subject DIGFORN-LD

Course Instructional Method All 🔻

Student Type (FTIC) All

Class Academic Group All •

Age Group All

Ethnic Group All

Gender All

Custom Cohort | All -

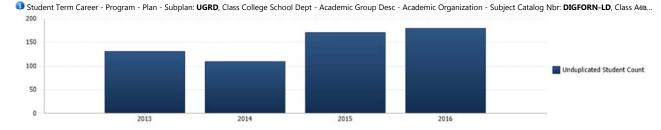
Student Group All -

Course Group All •

SharePoint Newsfeed OneDrive Sites Robert Mohr III -

Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan

Unduplicated Student Count Graph



Unduplicated Student Count

3 Student Term Career - Program - Plan - Subplan: UGRD, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: DIGFORN-LD, Class Ada...

| Term Academic Year - Term Desc | Unduplicated Student Count |
|--------------------------------|----------------------------|
| ▶ 2013 | 131 |
| ▶ 2014 | 110 |
| ▶ 2015 | 171 |
| ▶ 2016 | 179 |

Student System Cube Refresh

Last Refresh: 2/12/2018 5:24:16 AM

CAPR Process Document

CAPR Process Document

Academic Year - Term Desc - Multi 2013, 2014, 2015, 2016 ▼

Campus Description All

Academic Plan - Multi All 💌

College - Group - Acad Org - Subject DIGFORN-LD

Course Instructional Method All 🔻

Student Type (FTIC) All

Class Academic Group All •

Age Group All

Ethnic Group All

Gender All

Custom Cohort All -

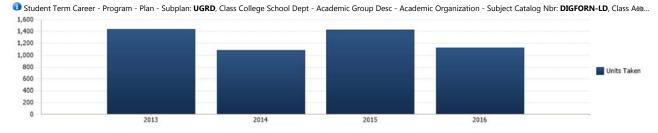
Student Group All •

Course Group All •

SharePoint Newsfeed OneDrive Sites Robert Mohr III

Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan

SSH Enrollment Graph



SSH Enrollment

📵 Student Term Career - Program - Plan - Subplan: UGRD, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: DIGFORN-LD, Class A&a...

| Term Academic Year - Term Desc | Units Taken |
|--------------------------------|-------------|
| ▶ 2013 | 1,434 |
| ▶ 2014 | 1,077 |
| ▶ 2015 | 1,425 |
| ▶ 2016 | 1,116 |

Student System Cube Refresh

Last Refresh: 2/12/2018 5:24:16 AM

CAPR Process Document

CAPR Process Document

Academic Year - Term Desc - Multi 2013, 2014, 2015, 2016 ▼

Campus Description All

Academic Plan - Multi All 💌

College - Group - Acad Org - Subject DIGFORN-LD •

Course Instructional Method All 🔻

Student Type (FTIC) All

Class Academic Group All •

Age Group All

Ethnic Group All

Gender All

Custom Cohort All •

Student Group All •

Course Group All •

17

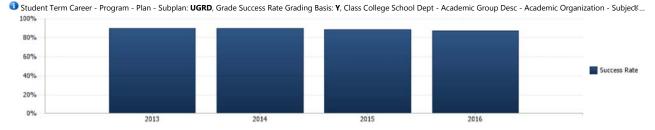
SharePoint Newsfeed OneDrive Sites Robert Mohr III -Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan Percent Full Metric Graph Student System Cube Refre: 📵 Class Status: Active, Full, Stop Further Enrollment, Class Academic Group: LD, UD, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr: DIGFORN-LD Last Refresh: 2/12/2018 5:24:16 AN 200% 150% **CAPR Process Document** Percent Full CAPR Process Document 100% 50% Academic Year - Term Desc - Multi F 0% Fall Term 2016-2017 (0520) Spring Term 2016-2017 (0525) Summer Term 2016-2017 (0530) Fall Term 2017-2018 (0535) Campus Description | AII Percent Full Metric by Instructional Method College - Group - Acad Org - Subject Class Status: Active, Full, Stop Further Enrollment, Class Academic Group: LD, UD, Class College School Dept - Academic Group Desc - Academic Organization - Subject Catalog Nbr. DIGFORN-LD, Filter empty rows and columilis Term Academic Year - Term Desc Measures Course Instructional Method | All -170 Fall Term 2016-2017 (0520) Enrollment Count Fall Term 2016-2017 (0520) Standard Course Load 150 Fall Term 2016-2017 (0520) Percent Full Spring Term 2016-2017 (0525) Enrollment Count Class Status | Active, Full, Stop Further Spring Term 2016-2017 (0525) Standard Course Load 150 Spring Term 2016-2017 (0525) Percent Full 106.0% Summer Term 2016-2017 (0530) Enrollment Count 43 Student Group | All -Summer Term 2016-2017 (0530) Standard Course Load Summer Term 2016-2017 (0530) Percent Full Fall Term 2017-2018 (0535) Enrollment Count Fall Term 2017-2018 (0535) Standard Course Load 150 Course Group All • Fall Term 2017-2018 (0535) Percent Full

18

SharePoint Newsfeed OneDrive Sites Robert Mohr Ⅲ ▼

Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan

Success Rate Graph



Performance

📵 Student Term Career - Program - Plan - Subplan: UGRD, Grade Success Rate Grading Basis: Y, Class College School Dept - Academic Group Desc - Academic Organization - Subject...

| Term Academic Year - Term Desc | Enrollment Count | Success Rate | Withdrawal Rate | F Rate | WF Rate |
|--------------------------------|------------------|--------------|-----------------|--------|---------|
| ▶ 2013 | 478 | 90.0% | 4.0% | 3.1% | 1.9% |
| ▶ 2014 | 359 | 89.4% | 1.7% | 4.7% | 1.1% |
| ▶ 2015 | 475 | 88.6% | 2.1% | 5.9% | 1.1% |
| ▶ 2016 | 372 | 87.4% | 3.0% | 5.1% | 2.7% |

Student System Cube Refresh

Last Refresh: 2/12/2018 5:24:16 AM

CAPR Process Document

CAPR Process Document

Academic Year - Term Desc - Multi 2013, 2014, 2015, 2016 ▼

Campus Description All

Academic Plan - Multi All •

College - Group - Acad Org - Subject | DIGFORN-LD -

Course Instructional Method All •

Student Type (FTIC) All

Age Group All

Ethnic Group All

Gender All

Student Group All •

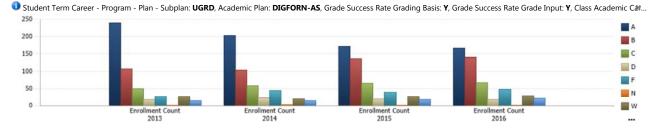
Course Group All •

19

SharePoint Newsfeed OneDrive Sites Robert Mohr Ⅲ •

Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan

Student Grade Distribution Graph



Student System Cube Refresh

Last Refresh: 2/12/2018 5:24:16 AM

CAPR Process Document

CAPR Process Document

Campus Description All

Academic Year - Term Desc - Multi 2013, 2014, 2015, 2016 ▼

Academic Plan - Multi DIGFORN-AS •

Course Instructional Method All •

Student Type (FTIC) All

Class Academic Group All •

Age Group All

Ethnic Group All

Gender All

Student Group All •

Course Group All •

Student Grade Distribution

📵 Student Term Career - Program - Plan - Subplan: UGRD, Academic Plan: DIGFORN-AS, Grade Success Rate Grading Basis: Y, Grade Success Rate Grade Input: Y, Class Academic C#...

| | Enrollment Count | | | | | | | | |
|--------------------------------|------------------|-----|-----|----|----|----|---|----|----|
| | ■ All | | | | | | | | |
| Term Academic Year - Term Desc | | Α | В | С | D | F | N | W | WF |
| ▶ 2013 | 483 | 239 | 108 | 50 | 16 | 28 | 1 | 27 | 14 |
| ▶ 2014 | 469 | 203 | 104 | 59 | 22 | 45 | 3 | 19 | 14 |
| ▶ 2015 | 473 | 171 | 136 | 65 | 18 | 39 | 1 | 27 | 16 |
| ▶ 2016 | 491 | 167 | 141 | 68 | 17 | 48 | 1 | 29 | 20 |



Industry Certification Attainment

An industry certification or equivalent state or national exam has not been identified for the Digital Forensics program for evidence of certification attainment at the associate level.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness

Course Groups

An internship course has not been identified for the Digital Forensics program at the associate level.

View: Program Plans Taken by Plan

Date: **2/12/2018**

Dashboard: Program Plans Taken by Plan

(0505), Spring Term 2015-2016 (0510), Summer Term 2015-2016 (0515), Fall Term 2016-2017 (0520), Spring Term 2016-2017

(0525),Summer Term 2016-2017 (0530),Fall Term 2017-2018 (0535),All

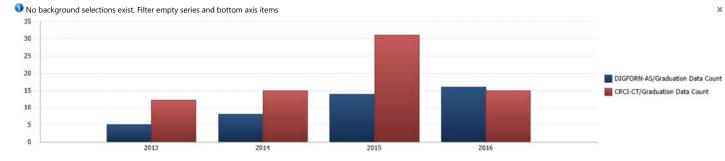
| | Academic Plan | Fall Term 2015-2016 (0505) Unduplicated Student Count | Spring Term 2015- 2016 (0510) Unduplicated Student Count | Summer Term 2015- 2016 (0515) Unduplicated Student Count | Fall Term 2016-2017 (0520) Unduplicated Student Count | Spring Term 2016- 2017 (0525) Unduplicated Student Count | Summer Term 2016- 2017 (0530) Unduplicated Student Count | Fall Term 2017-2018 (0535) Unduplicated Student Count |
|---|---------------|--|---|---|--|---|---|--|
| A | .II | 63 | 52 | 26 | 39 | 38 | 19 | 21 |
| | DIGFORN-AS | 63 | 46 | 18 | 29 | 21 | 9 | 6 |
| | COMPNET-AS | | | | 1 | 1 | | 1 |
| | ENRCH-NO | | 1 | 1 | 1 | | | 1 |
| | GEN-AA | | 2 | 3 | 1 | 2 | 1 | 2 |
| | BUS-AS | | | | | 1 | 1 | |
| | CIT-AS | | | | 1 | | 1 | 1 |
| | CJPSS-AS | | | | 1 | 1 | | 1 |
| | CST-AS | | 1 | 1 | 2 | 2 | 1 | |
| | ITSC-AS | | 1 | 1 | 1 | 2 | | 1 |
| | ITSC-CT | | | | | 1 | | |
| | PSA-BAS | | 1 | 2 | 1 | 6 | 5 | 6 |
| | TMGT-BAS | | | | 1 | 1 | 1 | 2 |
| | | | | | | | | |

Newsfeed OneDrive Sites Robert Mohr III ▼

SharePoint

Enrollment | Performance | Percent Full | Graduates | Grade Distribution | Course Groups | Program Plans Taken by Plan

Overall Graduates Trend



Overall Graduates Count

1 No background selections exist, Filter empty rows and columns

| | • | | | | |
|-------------------------------------|------------------------------|--------|--------|--------|--------|
| Graduation Degree - Plan - Sub Plan | Measures | ▶ 2013 | ▶ 2014 | ▶ 2015 | ▶ 2016 |
| DIGFORN-AS | Graduation Data Count | 5 | 8 | 14 | 16 |
| CRCI-CT | Graduation Data Count | 12 | 15 | 31 | 15 |

Student System Cube Refresh

Last Refresh: 2/12/2018 5:24:16 AM

CAPR Process Document

CAPR Process Document

Academic Year - Term Desc - Multi

Graduation Degree Plan Subplan - Multi

Graduation Degree Plan Subplan - Multi

Gender All

Ethnic Group All

Student Group All

Custom Cohort All

Custom Cohort All



Faculty/Adjunct Ratio

Equated Credit Hours by Faculty Classification

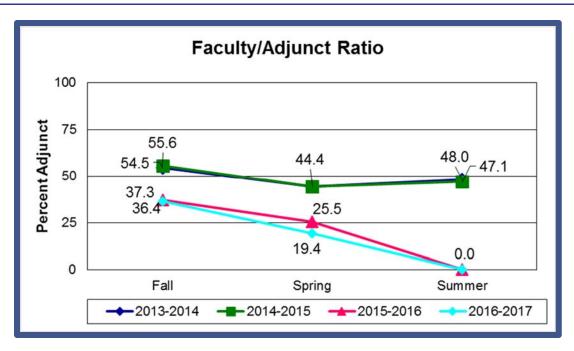
| | | Fulltime Percent of Load Adjunct Faculty Faculty Faculty | | Percent of Load Faculty | | |
|------------------|-------------------|--|-------------------|----------------------------|-------------------|---------------------------|
| | Number of ECHs | % of Classes Taught | Number of ECHs | % of Classes Taught | Number of ECHs | % of Classes Taught |
| Fall 2013-2014 | 12.5 | 45.5% | 0.0 | 0.0% | 15.0 | 54.5% |
| Spring 2013-2014 | 15.0 | 55.6% | 0.0 | 0.0% | 12.0 | 44.4% |
| Summer 2013-2014 | 6.5 | 52.0% | 0.0 | 0.0% | 6.0 | 48.0% |
| 2013-2014 Total | 34.0 | 50.7% | 0.0 | 0.0% | 33.0 | 49.3% |
| Fall 2014-2015 | 12.0 | 44.4% | 0.0 | 0.0% | 15.0 | 55.6% |
| Spring 2014-2015 | 15.0 | 55.6% | 0.0 | 0.0% | 12.0 | 44.4% |
| Summer 2014-2015 | 6.8 | 52.9% | 0.0 | 0.0% | 6.0 | 47.1% |
| 2014-2015 Total | 33.8 | 50.6% | 0.0 | 0.0% | 33.0 | 49.4% |
| Fall 2015-2016 | 16.0 | 62.7% | 0.0 | 0.0% | 9.5 | 37.3% |
| Spring 2015-2016 | 19.0 | 74.5% | 0.0 | 0.0% | 6.5 | 25.5% |
| Summer 2015-2016 | 10.0 | 100.0% | 0.0 | 0.0% | 0.0 | 0.0% |
| 2015-2016 Total | 45.0 | 73.8% | 0.0 | 0.0% | 16.0 | 26.2% |
| Fall 2016-2017 | 10.5 | 63.6% | 0.0 | 0.0% | 6.0 | 36.4% |
| Spring 2016-2017 | 12.5 | 80.6% | 0.0 | 0.0% | 3.0 | 19.4% |
| Summer 2016-2017 | 3.0 | 100.0% | 0.0 | 0.0% | 0.0 | 0.0% |
| 2016-2017 Total | 26.0 | 74.3% | 0.0 | 0.0% | 9.0 | 25.7% |

Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S_FACRAT).



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness





Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S_FACRAT).



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Occupation Profile



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Occupation Description

There was no occupation description for Information security analysts (151122) found in the DEO website.

State and County Trends and Wage Information

The distribution of 2017 wage information for Information security analysts is located in the table below. The median hourly earnings for Information security analysts was \$39.72 in Florida and \$41.35 in Pinellas County.

Employment trend information for occupations related to Digital Forensics and Computer Investigations are also provided in the tables. An average annual increase in employment for Information security analysts (19.9% - 20.0%) is shown for the period between 2017 and 2025, across the state and county.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Employment Data

Growth for Information Security Analysts

| | Jobs (2017) | % Change (2017-2025) | Median Earnings |
|-----------------|-------------|----------------------|-----------------|
| Florida | 4,989 | 20.0% | \$39.72/hr |
| | | | |
| Pinellas County | 357 | 19.9% | \$41.35/hr |

Source: Florida Department of Economic Opportunity (DEO) http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Major Employers

Graduates of SPC's Digital Forensics and Computer Investigations - AS program are employed in various areas related to their field. The primary local employers of these graduates are Pinellas County Sheriff's Office, Verizon Wireless, and Raymond James Financial, as depicted in the table below.

Major Employers

Employers of Digital Forensics and Computer Investigations - AS Graduates

Pinellas County Sheriff's Office

Verizon Wireless

Raymond James Financial

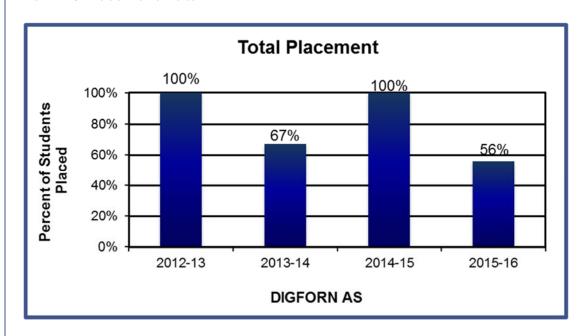
Source: Recent Alumni Survey reports and program administrator records



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



2017-18 Placement Data



| DIGFORN AS | | | | | | |
|------------|------------|----------------|--|--|--|--|
| | Pool Count | Percent Placed | | | | |
| 2012-13 | 1 | 100% | | | | |
| 2013-14 | 3 | 67% | | | | |
| 2014-15 | N/A | 100% | | | | |
| 2015-16 | N/A | 56% | | | | |

Source: FETPIP Follow-up Outcomes http://www.fldoe.org/fetpip/ccs.asp



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



State Graduates Outcomes

Digital Forensics and Computer Investigations Program Graduates 2015-16 Outcomes by Florida Community College

| Florida Community College | Total Completers | # Found Employed | # Employed for a Full Qtr | % Employed For a Full Qtr | FETPIP Pool | # Training Related (Employed or Education) | Placement Rate |
|-------------------------------------|---------------------|------------------------|------------------------------------|------------------------------------|----------------|--|-------------------|
| St. Johns River State College | *** | - | - | 0% | **** | **** | 100% |
| St. Petersburg College | 14 | *** | *** | ***% | **** | **** | 56% |
| Total | 14 | 0 | 0 | 0% | 0 | 0 | N/A |

^{****} Graduate values less than 10 but greater than 0.

Source: FETPIP Florida College System Vocational Reports http://www.fldoe.org/accountability/fl-edu-training-placement-info-program/fl-college-system-vocational-reports.stml



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness

^{***%} Percentage based on numerator less than 10 and denominator 10 or more.

⁻ Graduate value equal to 0.



Academics



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Educational Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AS/BS/BAS program every three years to evaluate the quality of the program's educational outcomes. The Digital Forensics and Computer Investigations - AS program was evaluated through an Academic Program Assessment Report (APAR).

Each of the Program Learning Outcomes (PLOs) was evaluated during the 2016-17 assessment. Each of the three PLOs is listed below:

- 1. The student will apply criminal investigation techniques to a variety of computer forensic investigations.
- 2. The student will collect digital evidence and research a possible criminal or civil infraction.
- 3. The student will conduct digital investigations while applying legal, regulatory, and ethical considerations.

Means of Assessment

The purpose of the End of Program assessment is to make summative interpretations for program improvement.

The Digital Forensics and Computer Investigations (AS) program used the results of a locally developed closed book, 48-item structured response (multiple-choice) assessment instrument. The criteria for success stated that students should attain a mean score of 70% or greater.

Data were collected during Summer 2015 - Fall 2016. Students achieved a score of 70% for all three PLOs and met the criteria for success each of the three years included in the assessment.

The 2016-17 follow-up report draft has not yet been approved.

For the complete 2016-17 Digital Forensics and Computer Investigations Program Assessment Report, please see Appendix B.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Stakeholder Perceptions



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Student Survey of Instruction (SSI)



Source: St. Petersburg College Student Survey of Instruction database



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness

St. Petersburg College

SPC

Digital Forensics 2015-16 Alumni Survey Report

Survey of 2014-15 Graduates

A.S. Degree: Digital Forensics and Computer Investigations

Certificate: Computer-Related Crime Investigations

Alumni Survey Information

Graduates are sent one survey to complete, even in cases where they may have earned multiple degrees within the same year. In these cases, the reported number of surveys sent and responses received are counted once per degree or certificate awarded to the student.

Twenty-one Alumni Surveys were provided to the 2014-15 graduates of the Digital Forensics program. One response was received from a Certificate completer. Since a single response cannot accurately represent the entire program, alumni survey results will not be reported.

St. Petersburg College

SPC

Digital Forensics 2015-16 Employer Survey Report

Employer Survey of 2014-15 Graduates

Employer Survey Information

Although employers are surveyed one time per graduate, some graduates may have earned multiple awards. Therefore, the number of surveys administered and responses received are reported for each degree or certificate the student was awarded.

Employer Surveys are sent out based on the permission provided by recent graduates in the 2014-15 recent graduate survey. Since permission was not received from recent graduates, there is no Employer Survey information available.



Program Action Plan

Program: Digital Forensics and Computer Investigations, AS

Date Completed: April 27, 2018

Prepared By: Kevin Thomas

I. Action Plan Items:

| | Action Item | Measure Addressed | Completion Date | Responsible Party |
|---|---|----------------------|--------------------|----------------------|
| 1 | Explore potential student internships with Fiz Business Solutions (a local data recovery and managed IT company). | Job Placement | October 2018 | Kevin Thomas |

II. Special Resources Needed:

None.

III. Area(s) of Concern/Improvement:

None.



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



References

Rule 6A-14.060(5). Florida Administrative Code, Accountability Standards. Retrieved February 2018, from the Division of Community Colleges Web site: https://www.flrules.org/gateway/ruleno.asp?id=6A-14.060

Contact Information

Please address any questions or comments regarding this evaluation to:

Magaly Tymms, M.A.
Director, Institutional Effectiveness
St. Petersburg College, P.O. Box 13489, St. Petersburg, FL 33733 (727) 341-3195
tymms.magaly@spcollege.edu



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness



Appendices



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness

PROGRAM OF STUDY

College of Public Safety Administration Digital Forensics and Computer Investigations Associate in Science DIGFORN-AS

Effective Catalog Term: Fall 2016 (0520) through Present (CIP# 1743011600)

The requirements below may not reflect degree requirements for continuing students. Continuing students should visit My SPC and view My Learning Plan to see specific degree requirements for their effective Catalog term.

Program Leadership Information

publicsafetyadvising@spcollege.edu -, -

Kevin Thomas, Lead Instructor, AC (727) 341-4540

Brian Frank, Dean, AC (727) 341-4503

Sharon Setterlind, Dean setterlind.sharon@spcollege.edu 7273414677

Program Summary

This is a professional training program which will provide the student with skills in researching, investigating, using computer software, interpreting laws, and using the Internet as an investigative tool. The goal of this program is to prepare successful students for careers in corporate computer security investigation or similar careers in computer security and law enforcement. Also the courses have been aligned with industry certifications.

The prerequisites for entry to the curriculum are permission of the Dean; attend an interview session; and basic computer use skills: editing files, navigating a file system, and browsing the internet. The courses include tasks that will enhance the student's ability to obtain and interpret data from various sources. The student will also be provided with scenarios and case histories to explore and gain experience.

The **Academic Pathway** is a tool for students that lists the following items:

- the recommended order in which to take the program courses
- suggested course when more than one option exists
- · which semester each course is typically offered
- if the course has a prerequisite
- courses that may lead to a certificate (if offered in the program)

If you are starting the program this term, click here to access the recommended Academic Pathway.

If you have already started the program, click here for the archived Academic Pathways.

Please verify the Academic Pathway lists your correct starting semester.

AS GENERAL EDUCATION REQUIREMENTS Communications - Composition

Credits

| Complete 3 credits from the approved General Education Composition I coursework below. Minimum grade of "C" required. This requirement must be completed within the first 24 credits of coursework toward the AS degree. | 3 |
|---|---------|
| Total Credits | 3 |
| AS GENERAL EDUCATION REQUIREMENTS Communications - Speech | Credits |
| Complete 3 credits from the approved General Education Speech coursework . Minimum grade of "C" required. | 3 |
| Total Credits | 3 |
| AS GENERAL EDUCATION REQUIREMENTS Humanities and Fine Arts | Credits |
| Complete 3 credits from the approved General Education Humanities and Fine Arts coursework. Minimum grade of "C" required. | 3 |
| Total Credits | 3 |
| AS GENERAL EDUCATION REQUIREMENTS Mathematics | Credits |
| Complete 3 credits from the approved General Education Mathematics coursework. Minimum grade of "C" required. | 3 |
| Total Credits | 3 |
| AS GENERAL EDUCATION REQUIREMENTS Ethics | Credits |
| Complete 3 credits from the approved General Education Ethics coursework. Minimum grade of "C" required. | 3 |
| Total Credits | 3 |
| AS GENERAL EDUCATION REQUIREMENTS Computer/Information Literacy Competency | Credits |
| Competency may be demonstrated by completing the Computer Information and Literacy Exam (CGS 1070T) OR by successful completion of one of the approved Computer/Information Literacy Competency courses. No minimum credits required. | |
| Total Credits | 0 |
| AS GENERAL EDUCATION REQUIREMENTS Enhanced World View | Credits |

Complete at least one 3-credit course intended to enhance the student's world view in light of an increasingly globalized economy. Minimum grade of "C" required. In some cases, this course may also be used to satisfy another General Education Requirement.

Total Credits 0

| SUPPORT COURSES Psychology (Select 3 credits) Credit | | | | |
|---|--|---|--|--|
| | Completion of this requirement satisfies the General Education Social/Behavioral Science requirement for this AS degree. | | | |
| PSY 1012 🕒 | General Psychology | 3 | | |
| PSY 1012 H 🔑 | Honors General Psychology | 3 | | |
| Total Credits | | 3 | | |
| | | | | |

| MAJOR CORE | COURSES | Credits |
|----------------------|--|---------|
| CCJ 1020 🔑 | Introduction to Criminal Justice | 3 |
| CJE 1669 🔑 | Identity Theft Investigations | 3 |
| CJE 1680 🔑 | Introduction to Computer Related Crime Investigations | 3 |
| CJE 1681 🕒 | Internet as an Investigative Tool | 3 |
| CJE 1682 🔑 | Tracking and Profiling Hackers, Pedophiles and Internet Stalkers | 3 |
| CJE 1683 🔑 | Internet Pornography Investigations | 3 |
| CJE 1684 🔑 | Internet Fraud Investigations | 3 |
| CJE 1685 🔑 | Legal Aspects of Computer Related Criminal Investigations | 3 |
| CJE 1686 🔑 | Forensic Computer Related Crime Investigations | 3 |
| CJE 1687 🔑 | Computer Software Piracy and Copyright Infringement | 3 |
| CET 1171 C 📙 | Computer Repair Essentials | 3 |
| CIS 1358 🔑 | Operating System Security | 3 |
| CET 1172C 📙 | Computer Support Technician | 3 |
| CIS 2352 🔑 | Ethical Hacking | 3 |
| CTS 1120 🔑 | Network Security Foundations | 3 |
| Total Credits | | 45 |

| Total Credits | 6 | 33 | |
|---------------|------|-----|--|
| P | ID 5 | 560 | |



Program Assessment Report

Program: Digital Forensics

Report Year: 2016-17

Drafted by Kevin Thomas on Jul 3, 2017

Data Files

- □ Combined CJE1686.xlsx
- □ Combined CJE1685.xlsx
- □ Combined CJE1680.xlsx

Program Learning Outcomes

#1: The student will apply criminal investigation techniques to a variety of computer forensic investigations.

I. Use of Past Results

Digital Forensics is a new program that became effective in the 2011-12 academic year. New programs are allowed time for students to cycle through the program before assessment reports are required. While data collection has occurred since the program's inception, the program was not required to submit a formal assessment report until 2016-17.

II. Methodology

Means of Assessment: A locally developed assessment instrument was used to assess the achievements of students enrolled in the Associate in Science (AS) degree in Digital Forensics and Computer Investigations.

Date(s) of Administration: Summer 2015, Fall 2015, Summer 2016, Fall 2016

Assessment Instrument: A locally developed closed book, 48-item structured response (multiple-choice) assessment instrument

Population: The assessment was administered to students enrolled in the Digital Forensics and Computer Investigations AS Degree Program. Students who were enrolled in the course entitled CJE 1680 -- Introduction to Computer Related Crime Investigations were required to take the Final Exam assessment via the Learning Management System. Students completed the assessment and returned their answers to the Lead Instructor, Kevin Thomas, for evaluation.

III. Criteria for Success

Students should answer correctly a mean of greater than 70% on questions 11-20 of the assessment instrument.

IV. Summary of Assessment Findings

Results via Face-to-Face

| PLO 1 Score | es - CJE | E1680 | | |
|----------------|----------|---------------|----------------------------|-----------------|
| Semester | N | Mean Score | Criteria for Success | Met Criteria |
| Summer 2015 | 22 | 81.8% | 70% | Yes |

| Fall 2015 | 33 | 77.6% | 70% | Yes |
|----------------|----|-------|-----|-----|
| Summer 2016 | 8 | 80.0% | 70% | Yes |
| Fall 2016 | 26 | 82.3% | 70% | Yes |

Results via Distance Delivery (Online, Blended, etc)

The Assessment course is taught exclusively face-to-face, there were no online sections.

V. Discussion and Analysis of Assessment Findings

The assessment results indicated that a total of 89 students were assessed during 2015 and 2016 and the mean scores related to PLO 1 were 81.8% for Summer 2015, 77.6% in Fall 2015, and 80.0% for Summer 2016 and 82.3% in Fall 2016 respectively. After a small decline in Fall 2015, the trend over the semesters has been positive. The scores indicate that students exceeded the criteria for success for this outcome for each of the 4 semesters that were assessed.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The Program Chair will research a better assessment instrument (such as an appropriate End of Program assessment) in order to better measure each of the PLO's. This action applies to all PLO's.
 Kevin Thomas / Jun 2018
- **#2:** The student will collect digital evidence and research a possible criminal or civil infraction.

I. Use of Past Results

Digital Forensics is a new program that became effective in the 2011-12 academic year. New programs are allowed time for students to cycle through the program before assessment reports are required. While data collection has occurred since the program's inception, the program was not required to submit a formal assessment report until 2016-17.

II. Methodology

Means of Assessment: A locally developed assessment instrument was used to assess the achievements of students enrolled in the Associate in Science (AS) degree in Digital Forensics and Computer Investigations.

Date(s) of Administration: Spring 2015, Spring 2016, Spring 2017

Assessment Instrument: A locally developed closed book, 75-item structured response (multiple-choice) assessment instrument

Population: The assessment was administered to students enrolled in the Digital Forensics and Computer Investigations AS Degree Program. Students who were enrolled in the course entitled CJE 1686 -- Forensic Computer Related Crime Investigations were required to take the Final Exam assessment via the Learning Management System. Students completed the assessment and returned their answers to the Lead Instructor, Kevin Thomas, for evaluation.

III. Criteria for Success

Students should answer correctly a mean of greater than 70% on questions 1-10 of the assessment instrument.

IV. Summary of Assessment Findings

Results via Face-to-Face

| PLO 2 Scores - CJE1686 | | | | |
|------------------------|---|------|----------|-----|
| Semester | N | Mean | Criteria | Met |

| | | Score | for Success | Criteria |
|----------------|----|-------|----------------|----------|
| Spring 2015 | 18 | 91.6% | 70% | Yes |
| Spring 2016 | 28 | 90.0% | 70% | Yes |
| Spring 2017 | 48 | 93.0% | 70% | Yes |

Results via Distance Delivery (Online, Blended, etc)

The Assessment course is taught exclusively face-to-face, there were no online sections.

V. Discussion and Analysis of Assessment Findings

The assessment results indicated that a total of 94 students were assessed and the mean scores related to PLO 2 were 91.6% (Spring 2015), 90.0% (Spring 2016) and 93.0% (Spring 2017) respectively. The 3 year trend shows an improvement from Spring 2015 to Spring 2017. The scores indicate that students exceeded the criteria for success for this outcome.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The Program Chair will research a better assessment instrument (such as an appropriate End of Program assessment) in order to better measure each of the PLO's. This action applies to all PLO's.
 Kevin Thomas / Jun 2018
- **#3:** The student will conduct digital investigations while applying legal, regulatory, and ethical considerations.

I. Use of Past Results

Digital Forensics is a new program that became effective in the 2011-12 academic year. New programs are allowed time for students to cycle through the program before assessment reports are required. While data collection has occurred since the program's inception, the program was not required to submit a formal assessment report until 2016-17.

II. Methodology

Means of Assessment: A locally developed assessment instrument was used to assess the achievements of students enrolled in the Associate in Science (AS) degree in Digital Forensics and Computer Investigations.

Dates of Administration: Spring 2015, Spring 2016, Spring 2017

Assessment Instrument: A locally developed closed book, 40-item structured response (multiple-choice) assessment instrument

Population: The assessment was administered to students enrolled in the Digital Forensics and Computer Investigations AS Degree Program. Students who were enrolled in the course entitled CJE 1685 -- Legal Aspects of Computer Related Criminal Investigations were required to take the Final Exam assessment via the Learning Management System. Students completed the assessment and returned their answers to the Lead Instructor, Kevin Thomas, for evaluation.

III. Criteria for Success

Students should answer correctly a mean of greater than 70% on questions 21-30 of the assessment instrument.

IV. Summary of Assessment Findings

Results via Face-to-Face

| PLO 3 Scor | es - CJ | E1685 | | |
|----------------|---------|---------------|----------------------------|-----------------|
| Semester | N | Mean Score | Criteria for Success | Met Criteria |
| Spring 2015 | 22 | 81.4% | 70% | Yes |
| Spring 2016 | 36 | 82.8% | 70% | Yes |
| Spring 2017 | 29 | 80.7% | 70% | Yes |

Results via Distance Delivery (Online, Blended, etc)

The Assessment course is taught exclusively face-to-face, there were no online sections.

V. Discussion and Analysis of Assessment Findings

The assessment results indicated that a total of 87 students were assessed during 2015, 2016 and 2017 and the mean scores related to PLO 3 were 81.4%, 82.8% and 80.7% respectively. The trend shows an increase in student scores in each of the three semesters that were assessed (2015 - 2017). The scores indicate that students exceeded the criteria for success for this outcome.

VI. Action Plan and Timetable for Implementation

Based on the analysis of the results the following Action Plan Items have been selected for implementation:

- The Program Chair will research a better assessment instrument (such as an appropriate End of Program assessment) in order to better measure each of the PLO's. This action applies to all PLO's.
 - Kevin Thomas / Jun 2018

Action Plan

| Category Action Plan Detail / Implications | For PLO | Responsible Party / Due Date |
|---|---------------|---------------------------------|
| D. Improve Assessment Methodology | | |
| D5. Revise assessment instruments | | |
| The Program Chair will research a better assessment instrument (such as an appropriate End of Program assessment) in order to better measure each of the PLO's. This action applies to all PLO's. | #1, #2, #3 | Kevin Thomas Jun 2018 |
| E. None | | |
| E1. No Action Plan is deemed necessary | | |
| No Action Plan is deemed necessary | | |

Approvals

Program Administrator:

Kevin Thomas - Professor, Digital Forensics

Approved by Kevin Thomas - Professor, Digital Forensics on Jul 3, 2017

Educational Outcomes Coordinators:

Joe Boyd - Coord, Accredtn&BaccAssessment

Magaly Tymms - Assessment Director

Approved by Joe Boyd - Coord, Accredtn&BaccAssessment on Jul 17, 2017

Dean

Brian Frank - Dean

Approved by Brian Frank - Dean on Jul 27, 2017

Senior Vice President:

Anne Cooper - Senior VP Instruction and Academic Programs

Approved by Anne Cooper - Senior VP Instruction and Academic Programs on Jul 31, 2017



Appendix C: 2017 Advisory Committee Minutes and Recommendations

Advisory Board Meeting Minutes for February 2017 and September 2017 are provided within this Appendix.

For additional Advisory Board Committee Minutes and Recommendations, please refer to the following link: http://www.spcollege.edu/friends-partners/work-with-spc/advisory-committees



Digital Forensics and Computer Investigations - AS 2017-18 Enhanced Comprehensive Academic Program Review Institutional Research and Effectiveness

Public Safety Advisory committee meeting Tuesday, February 14, 2017

Members present: Ken Afienko (SPC-PSA), Carol Rasor-Cordero (SPC-PSA), Guy Keirn (Pinellas Park Fire Department), Rick Graham (Lealman Fire District), Rosanne Beck (SPC-PSA), Michael Hughes (SPC-PSA), Kevin Thomas (SPC-PSA), Keith Murray (Pinellas County), Mark Berger (Pinellas Park Police), David Romine (Retired SPD), Kimberly Gaskin (SPC-PSA).

Members absent: Brian Frank (Dean, SPC-PSA), Sally Bishop (Director, Pinellas County Emergency Management), Geoffrey Brown (SPC-PSA), Charles Crowther (Program Chair, SPC Fire Science), Dale Konig (Department Chair, Pinellas Park High School), Greg Mason (PCSO), John Mauro (PCSO), Deborah McDonald (FDLE, Tampa Bay Regional Operations Center), Deborah Mortellaro (Career Outreach Specialist, SPC), John Romeo (FDLE, Tampa Bay Regional Operations Center), Dorene Thomas (SPC-PSA).

- Call to order
- II. Welcome
 - a. Introduction of members and guests

lii. Announcements

Kevin Thomas: Digital forensics applied for innovation grant, we plan to start a student lab at the EpiCenter that is designed to give students a real-life experience with forensics investigations in conjunction with the Tampa Bay Electronic Crimes Task Force. The lab at Epi has 10 computers. We need to order hardware and software. Hopefully by next fall it is up and running. Internship investigation activities. Right now just for enrolled students; CCIT and digital forensic students. Still working out licensing rules.

Iv. EAM /fire science

- a. Fire science online course offerings. No new developments at this time.
- V. Criminal justice Lakewood high school initiative

Mike Hughes

The Lakewood High School initiative has outgrown its name since expansion has reached to seven different schools in Pinellas County. These include: Gibbs High School, Dixie Hollins High School, Pinellas Park High, Seminole High, Osceola Boca Ciega High School, and St. Petersburg High School. The Dual Enrollment program involves juniors and seniors getting the opportunity to earn college credit while in high school in the Public Safety and Criminal Justice fields. The Dual enrollment courses take place after the regular school day from 3:00-4:15pm.We are looking for that group of students who are somewhere in that 2.5-3.0 range GPA, despite the standard 3.0 GPA that is required. For students who are borderline to meeting the

requirements, exceptions are made. This is not a program for recruitment. Student have the opportunity to get 12 college credits in any program they want to. It builds confidence in the student so that they can be successful in a college environment. Students don't know PSA and CJI jobs. Student will take Investigative Trends and Crime & Delinquency in their junior year. In their senior year, they will take Research Methods and the NIMS course, to get an idea of Homeland Security. Our challenge is that we are working this in conjunction with St Pete PD. This is a critical time because those juniors and seniors for next year are making up their schedules for fall. My goal is to introduce this program with more enthusiasm. Talk to parents about program on nights that they are at the school. Criminal Justice St Petersburg College Cadet Program is the new proposed name for the initiative to encompass all schools involved.

We have an articulation program with Pinellas Park when they come out of the high school program. St Pete, fire Program is happening out of Gibbs High School. The schools have a willingness to expose kids to these things. Our program is in its fledgling stage. I anticipate there would be an uptick. To be competitive to get into any school, a good college transcript is vital. If you want to progress in careers, get the education. Try to work more closely with Gibbs and St Pete fire. Gibbs is trying to get a leadership academy. I am talking about Adjusting curriculum to accommodate the leadership academy. School fire side or criminal justice. Chief Holloway called cadet program, get young folks interest in SPPD. Clearwater PD doing something with Public Service Aid. 30 hours of course work available to be taken.

Guy Keirn – In the City of Pinellas Park Fire Department there are Explorer posts. Thus far, we've hired 5 for firefighter/paramedics. Right now, there are 34 students for fire academy, and only one paramedic. We could hire 30 in this county right now. We can probably get them from other parts of the county and state. Four of 5 Explorers we have, have degrees from St. Petersburg College.

Mark Berger: Explorers start to learn culture of organizations; learn what rank structure means, and they compete for different ranks. Experience Ride —a-longs; immerse into the culture of police department. It boosts their confidence. Had success in hiring explorers, some 19 years old. Gives Fire explorers a sense of community.

Vi. Public Safety Upper Division

Rosanne Beck: With Quality Enhancement Plan (QEP), the College is doing this for SACS Accreditation. This year's theme is Ready, Set, Success. They have chosen working with students. This is similar to Smart Start. This program that is being put together is designed to help students get started in college for free. Still in the planning stages.

Vii. Open discussion

Guy Keirn: PSAV program. Penny Agers will be conducting a class in the future. Currently we have 34 Fire Academy students, 27 of which are in that program at HEC. The first class is in July. There will be approximately 80 students. It is anticipated to be a large program on the State and National level.

Viii. Summary of discussion and actions

Ix. Adjournment

College of Public Safety Administration advisory meeting

Tuesday, September 19, 2017

Members Present: Charles Crowther (SPC-PSA), Kimberly Gaskin (SPC –PSA), Guy Kiern (Pinellas Park Fire Department), Mark Berger (Pinellas Park Police), Kenneth Afienko (SPC-PSA), Carol Rasor (SPC-PSA), David Romine (Retired SPD), Kevin Thomas (SPC-PSA), Geoffrey Brown (SPC-PSA), Rick Graham (Lealman Fire District), Rosanne Beck (SPC-PSA)

Members Absent: Sally Bishop (Pinellas County Emergency Management), Brian Frank (Dean, SPC-PSA), Michael Hughes (SPC-PSA), Dale Koning (Pinellas Park High School), Greg Mason (PSCO Forensics Department), John Mauro (PSCO), Deborah McDonald (FDLE Tampa Bay Regional Operations Center), Deborah Mortellaro (SPC), Keith Murray (Pinellas County Public Safety Services – No longer on board), John Romeo (FDLE Tampa Bay Regional Operations Center), Dorene Thomas (SPC-PSA), Sandra Brooking (Pinellas County EMS & Fire Administration- new).

Welcome and Announcements

Guy Kiern, Charles Crowther and David Brumfield and are set to retire within the 2017-18 Academic Year.

• EAM / Fire Science

Charlie: The Fire Science Program has been on a downward slide for about the last 5 years. Before we shared the program with Valencia College, we did an online program in partnership with 15 other colleges. More and more lately, the college has tried to implement this program. At this point, as far as enrollment is concerned, we are somewhere between 3-5% over the last semester. In the last 15 years or so, the EAM program would graduate somewhere between 5-12 students. Last year, we only had three graduate. The program was on the brink of shutting down, but it was delayed due to enrollment picking up again.

Firefighters would use completed courses taken elsewhere for certificates and when they come here for degrees, use the courses toward something related to the subject matter they are interested in, which bolsters the number in the program but does not bolster the number of graduates. To help move the number of graduates up in that program, Pinellas County and Pinellas County police chiefs came to our training division on the law enforcement side, to implement a program for dispatchers. We put together that program, which is in the process of being certified with 100 hours online, 50 hours in classroom and 40 hours of practical experience at 4 different locations throughout the county. Once students complete that program, we are going to implement a program where it will articulate into the EAM degree program. Basically, they will get somewhere between 9-12 credits toward that degree for having completed. This is an effort to increase enrollment in that program so that it is not eliminated.

• Criminal Justice Lakewood High School Initiative

Lakewood High school and some of the other local high schools are putting together a program within their advisory groups that will allow students to enter into a law enforcement-based dual enrollment program so that they will get some College credit while completing their high school requirements and then they can move into a Criminal Justice program if they decide. Last year there were only three students involved, this year there are 15.

As for the Fire Program, at this time, college credit is an issue. If students have Firefighter I certification, they will move on to the Firefighter II program.

• Public Safety Upper Division

The program is up by approximately 5.5 % versus the college being up 3%.

• Open Discussion

Discussion will be needed to decide who replaces retiring members of the advisory board. Should people be replaced, Dave Romine willing to step up where needed.

• Adjourned.





Data and information contained herein cannot be used without the express written authorization of the St. Petersburg College. All inquiries about the use of this information should be directed to the Executive Director of Institutional Research and Effectiveness at St. Petersburg College.