

**STATE BOARD OF EDUCATION**  
**Action Item**  
February 18, 2014

**SUBJECT:** Approval of Request from Eastern Florida State College for a BAS in Applied Health Sciences

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**PROPOSED BOARD ACTION**

For Approval

Degree Program for College with Prior Baccalaureate Authorization:

- Eastern Florida State College
  - BAS in Applied Health Sciences

**AUTHORITY FOR STATE BOARD ACTION**

Section 1007.33, Florida Statutes

**EXECUTIVE SUMMARY**

Section 1007.33, Florida Statutes, provides authority for site-determined baccalaureate degree access in the Florida College System. A letter of Intent followed by a proposal was submitted to the Department of Education. Appropriate notification of intent was provided to the Board of Governors, Independent Colleges and Universities of Florida and the Commission for Independent Education, as required in Section 1007.33, Florida Statutes. No alternative proposals were received for the program being proposed. An extensive review of criteria was conducted for the proposal submitted, and written comments and recommendations were provided to the college. The final submission was subsequently received and is being submitted to the State Board of Education for approval.

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**Supporting Documentation Included:** Baccalaureate Program Proposal – Executive Summary; Summary and Recommendation from Department; Section 1007.33, Florida Statutes; and complete proposal available upon request.

**Facilitator/Presenter:** Randy Hanna, Chancellor, The Florida College System

**Baccalaureate Program Proposal - Summary for February 18, 2014 State Board of Education Meeting**

College/Program/ Letter of Intent Date		Final Proposal Submitted	Alternate Proposals	Academic & Physical Resources	Curriculum & Faculty	Unmet Employment Need	Business Support	Budget & Fiscal Resources	Postsecondary Coordination	Program Start	Comments	Recommendation
Eastern Florida State College	BAS - Applied Health Sciences - 8/22/2013	1/16/2014	No	Strong	Strong	Strong Regional	Strong Regional	Adequate Foundation - Tuition and Fees, Florida College System Program Fund, Unrestricted Fund Balance	Good Coordination and Support	August 2014	This program includes concentrations in Advanced Allied Health and Biomedical Sciences, and the college demonstrates strong workforce demand for both concentrations.	Approve

**Baccalaureate Degree Program Proposal**  
**Recommendations from the Division of Florida Colleges Baccalaureate Review Team**  
**for Consideration by the Commissioner of Education**

A collaborative review was conducted by the Baccalaureate Review Team members, including staff from the Division of Florida Colleges and the Florida Colleges Budget Office. Written recommendations were submitted to the college by the review team, college staff revised the proposal, and submitted the final proposal, which is now complete and ready for consideration by the Commissioner of Education.

Direct questions or concerns to Abbey Ivey at 850-245-9492 or [abbey.ivey@fldoe.org](mailto:abbey.ivey@fldoe.org).

College	Degree Type	Degree Program	Date Submitted to SBOE
Eastern Florida State College	BAS	Applied Health Sciences  <i>No alternative proposals were received for this program.</i>	2/18/14

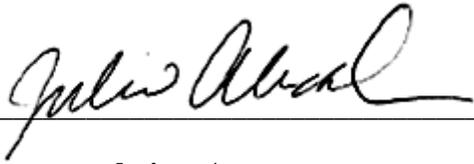
“Within 45 days following receipt of a completed proposal by the Division of Florida Colleges, the Commissioner of Education shall recommend approval or disapproval of the proposal to the State Board of Education.”  
Section 1007.33 (5)(e), F.S.

Comments		Summary
<b>A</b>	<b>Planning Process</b>	<p>Eastern Florida State College’s (EFSC) proposed Bachelor of Applied Science (BAS) in Applied Health Sciences will include concentrations in Advanced Allied Health and Biomedical Sciences. The Advanced Allied Health concentration will provide students with a broad-based foundation and prepare graduates to advance in the allied health profession to meet societal and healthcare delivery demands. The concentration in Biomedical Sciences will prepare students to work as laboratory assistants or clinical laboratory technologists, as well as in the fields of health policy development, public health, health economics promotion, product developments, biomedical sales or research, or other health-related fields.</p> <p>Planning activities for this program included hiring an external consultant, surveying current students, conducting multiple employer surveys, and obtaining input from advisory committees. Survey results, meeting minutes, and other planning documents are located in the Supplemental Materials, as are letters of support from local agencies.</p> <p>EFSC met with representatives from the University of Central Florida (UCF) and Daytona State College (DSC) regarding this degree program, and DSC provided a letter of support. Additionally, the college collaborated with the Florida Institute of Technology (FIT) to gain support for this program, and a letter of support from FIT is also included with the proposal.</p>
<b>B</b>	<b>Program Implementation Timeline</b>	The projected implementation date of upper division enrollment is August 2014. The complete timeline of implementation activities is located in Section B of the proposal.
<b>C</b>	<b>Workforce Demand/Unmet Need Specific to Program Area</b>	EFSC cites Economic Modeling Specialists, Inc. (EMSI) and reports there were 7,129 jobs in Brevard County in 2012 requiring a bachelor’s degree or a bachelor’s degree plus experience related to the Advanced Allied Health concentration. This total is projected to increase to 7,370 jobs by 2020 with 230 estimated annual job openings. The college reports the same occupational data reveals 3,860 jobs in 2012 related to the Biomedical Sciences concentration, with 4,410 projected jobs by 2018. The number of estimated annual job openings is 215.

		<p>The college reports there were 1,106 graduates with some type of healthcare management or biomedical sciences degree in 2012 from UCF and other regional nonpublic postsecondary institutions, but notes only 41 of these graduates were produced from an institution in Brevard County. EFSC states that based on their student demographics, it can be expected that the majority of these students were not from EFSC's service district and will not stay in the district after graduation. The college notes the current number of graduates in the Brevard region is not sufficient to keep up with the increased demand.</p> <p>Additionally, the college emphasizes that according to a 2010-2011 report, of the 470 Associate in Science (AS) graduates from EFSC, only 47 transferred to the State University System and none were found in a healthcare major.</p>
<b>D</b>	<b>Facilities and Equipment Specific to Program Area</b>	No new facilities will be needed for this program. EFSC has allocated funds for additional laboratory equipment for the upper level science courses.
<b>E</b>	<b>Library/Media Specific to Program Area</b>	The college has allocated \$82,500 as the start-up budget for updated library resources to support this program.
<b>F</b>	<b>Academic Resources Specific to Program Area</b>	The college plans to hire one full-time faculty member with a doctorate upon program approval to provide overall program leadership, and anticipates hiring an additional full-time faculty member by 2016. An academic advisor, adjunct librarian, and part-time administrative assistant will also be hired to support this program.
<b>G</b>	<b>Cost to Students</b>	<p>The cost for four years of study at EFSC and other regional postsecondary institutions, as reported by EFSC:</p> <p>EFSC = \$13,436  UCF = \$25,268  FIT = \$129,240</p> <p>This program will be part of the Governor's \$10,000 Bachelor's Degree Challenge and the college will defray the costs above \$10,000 for all qualified students.</p>
<b>H</b>	<b>Academic Content</b>	Admission to this program requires an Associate in Science (AS) degree in a health-related program, and students with an Associate in Arts (AA) degree will be reviewed on a case-by-case basis. The 60 credits of the upper division program include 21 credits of general education or technical electives and 39 credits of upper division coursework. The upper division coursework is comprised of six credits of common core courses and 33 credits in the chosen concentration.
<b>I</b>	<b>Enrollment, Performance and Budget Plan</b>	EFSC anticipates 125 enrolled students during the first year with a projected 25 percent enrollment growth each year for the first four years. The program will be supported primarily through tuition and fees, as well as the Florida College System Program Fund and the college's unrestricted fund balance. The full budget is located on page 30.
<b>J</b>	<b>Plan of Action if Program Must be Terminated</b>	In the event of program termination, EFSC would implement a timeline for notification and closure consistent with college policy. The college notes students will be given appropriate notice and guidance to complete the program, faculty will be reassigned, and the Southern Association of College and Schools (SACS) would be duly notified of the strategic teach-out plan for program closure.

**Recommendation: Approve**

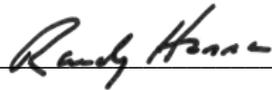
**Vice Chancellor for Academic and Student Affairs, Division of Florida Colleges**

  
\_\_\_\_\_

**Date 1/28/14**

**Recommendation: Approve**

**Chancellor, Division of Florida Colleges**

  
\_\_\_\_\_

**Date 1/30/14**

# The 2013 Florida Statutes

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## [Title XLVIII](#)

K-20 EDUCATION CODE

## [Chapter 1007](#)

ARTICULATION AND ACCESS

[View Entire Chapter](#)

### **1007.33 Site-determined baccalaureate degree access.—**

(1)(a) The Legislature recognizes that public and private postsecondary educational institutions play an essential role in improving the quality of life and economic well-being of the state and its residents. The Legislature also recognizes that economic development needs and the educational needs of place-bound, nontraditional students have increased the demand for local access to baccalaureate degree programs. It is therefore the intent of the Legislature to further expand access to baccalaureate degree programs through the use of Florida College System institutions.

(b) For purposes of this section, the term “district” refers to the county or counties served by a Florida College System institution pursuant to s. [1000.21\(3\)](#).

(2) Any Florida College System institution that offers one or more baccalaureate degree programs must:

(a) Maintain as its primary mission:

1. Responsibility for responding to community needs for postsecondary academic education and career degree education as prescribed in s. [1004.65\(5\)](#).

2. The provision of associate degrees that provide access to a university.

(b) Maintain an open-door admission policy for associate-level degree programs and workforce education programs.

(c) Continue to provide outreach to underserved populations.

(d) Continue to provide remedial education.

(e) Comply with all provisions of the statewide articulation agreement which relate to 2-year and 4-year public degree-granting institutions as adopted by the State Board of Education pursuant to s. [1007.23](#).

(f) Not award graduate credit.

(g) Not participate in intercollegiate athletics beyond the 2-year level.

(3) A Florida College System institution may not terminate its associate in arts or associate in science degree programs as a result of being authorized to offer one or more baccalaureate degree programs. The Legislature intends that the primary responsibility of a Florida College System institution, including a Florida College System institution that offers baccalaureate degree programs, continues to be the provision of associate degrees that provide access to a university.

(4) A Florida College System institution may:

(a) Offer specified baccalaureate degree programs through formal agreements between the

Florida College System institution and other regionally accredited postsecondary educational institutions pursuant to s. [1007.22](#).

(b) Offer baccalaureate degree programs that were authorized by law prior to July 1, 2009.

(c) Beginning July 1, 2009, establish a first or subsequent baccalaureate degree program for purposes of meeting district, regional, or statewide workforce needs if approved by the State Board of Education under this section.

Beginning July 1, 2009, the Board of Trustees of the St. Petersburg College is authorized to establish one or more bachelor of applied science degree programs based on an analysis of workforce needs in Pinellas, Pasco, and Hernando Counties and other counties approved by the Department of Education. For each program selected, St. Petersburg College must offer a related associate in science or associate in applied science degree program, and the baccalaureate degree level program must be designed to articulate fully with at least one associate in science degree program. The college is encouraged to develop articulation agreements for enrollment of graduates of related associate in applied science degree programs. The Board of Trustees of the St. Petersburg College is authorized to establish additional baccalaureate degree programs if it determines a program is warranted and feasible based on each of the factors in paragraph (5)(d). Prior to developing or proposing a new baccalaureate degree program, St. Petersburg College shall engage in need, demand, and impact discussions with the state university in its service district and other local and regional, accredited postsecondary providers in its region. Documentation, data, and other information from inter-institutional discussions regarding program need, demand, and impact shall be provided to the college's board of trustees to inform the program approval process. Employment at St. Petersburg College is governed by the same laws that govern Florida College System institutions, except that upper-division faculty are eligible for continuing contracts upon the completion of the fifth year of teaching. Employee records for all personnel shall be maintained as required by s. [1012.81](#).

(5) The approval process for baccalaureate degree programs shall require:

(a) Each Florida College System institution to submit a notice of its intent to propose a baccalaureate degree program to the Division of Florida Colleges at least 100 days before the submission of its proposal under paragraph (d). The notice must include a brief description of the program, the workforce demand and unmet need for graduates of the program to include evidence from entities independent of the institution, the geographic region to be served, and an estimated timeframe for implementation. Notices of intent may be submitted by a Florida College System institution at any time throughout the year. The notice must also include evidence that the Florida College System institution engaged in need, demand, and impact discussions with the state

university and other regionally accredited postsecondary education providers in its service district.

(b) The Division of Florida Colleges to forward the notice of intent within 10 business days after receiving such notice to the Chancellor of the State University System, the President of the Independent Colleges and Universities of Florida, and the Executive Director of the Commission for Independent Education. State universities shall have 60 days following receipt of the notice by the Chancellor of the State University System to submit objections to the proposed new program or submit an alternative proposal to offer the baccalaureate degree program. If a proposal from a state university is not received within the 60-day period, the State Board of Education shall provide regionally accredited private colleges and universities 30 days to submit objections to the proposed new program or submit an alternative proposal. Objections or alternative proposals shall be submitted to the Division of Florida Colleges and must be considered by the State Board of Education in making its decision to approve or deny a Florida College System institution's proposal.

(c) An alternative proposal submitted by a state university or private college or university to adequately address:

1. The extent to which the workforce demand and unmet need described in the notice of intent will be met.
2. The extent to which students will be able to complete the degree in the geographic region proposed to be served by the Florida College System institution.
3. The level of financial commitment of the college or university to the development, implementation, and maintenance of the specified degree program, including timelines.
4. The extent to which faculty at both the Florida College System institution and the college or university will collaborate in the development and offering of the curriculum.
5. The ability of the Florida College System institution and the college or university to develop and approve the curriculum for the specified degree program within 6 months after an agreement between the Florida College System institution and the college or university is signed.
6. The extent to which the student may incur additional costs above what the student would expect to incur if the program were offered by the Florida College System institution.

(d) Each proposal submitted by a Florida College System institution to, at a minimum, include:

1. A description of the planning process and timeline for implementation.
2. An analysis of workforce demand and unmet need for graduates of the program on a district, regional, or statewide basis, as appropriate, including evidence from entities independent of the institution.
3. Identification of the facilities, equipment, and library and academic resources that will be used to deliver the program.

4. The program cost analysis of creating a new baccalaureate degree when compared to alternative proposals and other program delivery options.

5. The program's admission requirements, academic content, curriculum, faculty credentials, student-to-teacher ratios, and accreditation plan.

6. The program's enrollment projections and funding requirements.

7. A plan of action if the program is terminated.

(e) The Division of Florida Colleges to review the proposal, notify the Florida College System institution of any deficiencies in writing within 30 days following receipt of the proposal, and provide the Florida College System institution with an opportunity to correct the deficiencies. Within 45 days following receipt of a completed proposal by the Division of Florida Colleges, the Commissioner of Education shall recommend approval or disapproval of the proposal to the State Board of Education. The State Board of Education shall consider such recommendation, the proposal, and any objections or alternative proposals at its next meeting. If the State Board of Education disapproves the Florida College System institution's proposal, it shall provide the Florida College System institution with written reasons for that determination.

(f) The Florida College System institution to obtain from the Commission on Colleges of the Southern Association of Colleges and Schools accreditation as a baccalaureate-degree-granting institution if approved by the State Board of Education to offer its first baccalaureate degree program.

(g) The Florida College System institution to notify the Commission on Colleges of the Southern Association of Colleges and Schools of subsequent degree programs that are approved by the State Board of Education and to comply with the association's required substantive change protocols for accreditation purposes.

(h) The Florida College System institution to annually, and upon request of the State Board of Education, the Commissioner of Education, the Chancellor of the Florida College System, or the Legislature, report its status using the following performance and compliance indicators:

1. Obtaining and maintaining appropriate Southern Association of Colleges and Schools accreditation;
2. Maintaining qualified faculty and institutional resources;
3. Maintaining enrollment in previously approved programs;
4. Managing fiscal resources appropriately;
5. Complying with the primary mission and responsibility requirements in subsections (2) and (3); and
6. Other indicators of success, including program completions, placements, and surveys of

graduates and employers.

The State Board of Education, upon review of the performance and compliance indicators, may require a Florida College System institution's board of trustees to modify or terminate a baccalaureate degree program authorized under this section.

(6) The State Board of Education shall adopt rules to prescribe format and content requirements and submission procedures for notices of intent, proposals, alternative proposals, and compliance reviews under subsection (5).

**History.**—s. 363, ch. 2002-387; s. 122, ch. 2007-217; s. 7, ch. 2007-246; s. 7, ch. 2009-228; s. 103, ch. 2011-5; s. 19, ch. 2012-134; s. 11, ch. 2012-195.

# **THE FLORIDA COLLEGE SYSTEM**

## **BACCALAUREATE PROPOSAL APPROVAL APPLICATION**

### **COVER SHEET**

**INSTITUTION: Eastern Florida State College (EFSC)**

**BACCALAUREATE DEGREE CONTACTS:**

#### **PRIMARY**

Name: Dr. Linda Miedema

Title: Vice President Academic Affairs & Chief  
Learning Officer

Phone: 321/433-7000

Email: miedemal@easternflorida.edu

#### **SECONDARY**

Name: Dr. Kathinka Babb

Title: Faculty Liaison Curriculum Development

Phone: 321/433-7581

Email: babbk@easternflorida.edu

**DEGREE TYPE (BS, BAS, other): Bachelor of Applied Science**

**DEGREE TITLE: Applied Health Sciences  
With concentrations in Advanced Allied Health and Biomedical Sciences**

**TOTAL NUMBER OF CREDIT HOURS: 120**

**PROPOSED DEGREE SIX-DIGIT CIP CODE: 51.2211**

**PLANNED PROGRAM IMPLEMENTATION DATE: Fall Semester 2014**

### **PROGRAM DESCRIPTION/EMPLOYMENT OPTIONS FOR GRADUATES:**

Eastern Florida State College successfully started its first BAS degree (Organizational Management) in August 2013. The College now proposes to offer Brevard County residents another opportunity to earn a Bachelor of Applied Science. The proposed BAS degree will be in Applied Health Sciences with two areas of concentration, Advanced Allied Health and Biomedical Sciences. The college will follow its long standing tradition of making learning relevant through real-world applications of theory. This degree complements the traditional vocational emphasis of EFSC by offering upward mobility into management for two-year Associate in Science degree graduates. The 120 credit hour program includes:

36 credit hours of general education courses

45 credit hours of lower division specialized courses

39 credit hours of upper division courses

○ 6 credits of a common core

○ 30 credits of courses in a chosen concentration

The program is designed to articulate with allied health related degree programs. The concentration will build upon the students existing professional knowledge enhancing their skills in communication, critical thinking, problem solving, and research and leadership theories. The students will learn to work

in a variety of settings with diverse patients, families, and communities. In addition, this specialized concentration will equip graduates with entry level management, group dynamic and supervisory skills as they relate to the allied health discipline. Successful completion of this program will allow students to pursue positions in nursing home administration as counselors, geriatric program developers, social service coordinators, and clinical or healthcare administration.

The concentration in Advanced Allied health is intended to provide students a broad-based foundation in global and national healthcare issues and trends, ethical and legal issues, health promotion and disease prevention, evidence-based practice, allied healthcare research, healthcare systems management, and healthcare based informatics. The concentration in Advanced Allied Health will prepare graduates with additional knowledge, skills and values to advance in the allied health profession to meet societal and healthcare delivery demands.

The concentration in Biomedical Sciences will focus on the health of both animals and humans. The advanced science courses in biology, biochemistry and cell biology will teach the student how the body reacts to disease, and how to both maintain and promote health in humans and animals. These students will be qualified to work as laboratory assistant, clinical laboratory technologists or in fields of health policy development, public health, health economics promotion, product development, biomedical sales or research, or other health related fields.

**BOARD OF TRUSTEES APPROVAL DATE: March 18, 2013**

**PRESIDENT'S SIGNATURE AND DATE:** \_\_\_\_\_

**Date:** 1/15/14

*Original application and subsequent revision submission must include a current signature/date.*

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## **EXECUTIVE SUMMARY**

**Institution: Eastern Florida State College (EFSC)**

**Degree Type: Bachelor of Applied Science (BAS)**

**Degree Title: Applied Health Sciences**

The proposed Applied Health Sciences BAS program will provide traditional and nontraditional students access to a baccalaureate degree that is both affordable and available within the service district. The degree will provide a smooth transition for current Associate in Science (AS) degree graduates and provides a pathway for transitioning adult workers to advance their career. Students with an earned Associate in Arts (AA) degree will be reviewed for acceptance on a case by case basis and receive intensive advising to obtain necessary technical skills. EFSC's BAS degree in Applied Health Sciences is designed around measurable student learning outcomes vetted by business advisory representatives from a broad cross section of area employers. The students will learn to work in a variety of settings with diverse patients, families, and communities. In addition, this specialized concentration will equip graduates with entry level management, group dynamic and supervisory skills as they relate to the allied health discipline. The program learning outcomes will serve as a high quality standard to ensure that graduates are prepared as successful organizational managers for careers in small business, industrial/technical, healthcare, government and non-profit sectors of the community. The Applied Health Sciences program will prepare graduates with additional knowledge, skills and values to advance in the allied health profession to meet societal and healthcare delivery demands.

### **A. Initial BAS Planning Process**

EFSC has a 50 year history of building and maintaining partnerships with four-year universities in the service district. The college currently operates articulation agreements with the University of Central Florida (UCF), Florida Institute of Technology (FIT), Daytona State College (DSC) and several on-line delivery schools. In January 2011, the Board of Trustees requested that the college conduct research on the feasibility of offering baccalaureate degrees to accommodate the significant changes in the Brevard workforce due to the retirement of the Space Shuttle program. The college administration then engaged in internal and external analyses by surveying its constituents. From March 21- April 21, 2011, current students were surveyed. The results indicated 92 percent wanted the College to offer four-year degrees. On January 10, 2012, the EFSC Vice President for Planning and Assessment discussed possible areas for a four-year degree program with the Associate Vice President of Regional Campuses-UCF Cocoa.

A survey of area employers conducted in January 2012 determined that 51% anticipated a growing need for college graduates, identified degrees in demand, and projected expected salaries. The summary of the discussions, the community and student survey results, review of the Regional Targeted Occupational List (TOL), and employment demand/projections generated by Economic Modeling Specialist, Inc. (EMSI) Strategic Advantage Model were reviewed. Equipped with results from the employer surveys, TOL, and EMSI research, EFSC returned to discussions with UCF. The outcome of this discussion was UCF's support of EFSC applying to offer a BAS in Applied Health Sciences. College leadership also collaborated with DSC and Florida Tech senior officials to gain support of the EFSC BAS degree.

On March 18, 2013, the Board of Trustees stressed the importance of maintaining the strong academic mission that EFSC's long tradition represents as well as the key role it plays as a driver of job creation and economic development in our community, and approved the action to submit a Letter of Intent to the Division of Florida Colleges, Florida Department of Education for a Bachelor of Applied Science degree in Applied Health Sciences.

## **B. Program Implementation Timeline**

Following the Board of Trustee approval, a letter of intent was filed per Florida Administrative Code 6A-14.095 to offer a BAS in Applied Health Sciences on August 15, 2013. The program timeline is based on offering the initial upper division courses in the fall semester 2014 contingent upon receiving approval from the State Board of Education by February 2014. A letter of notification of substantive change for accredited institutions will be filed by March 15, 2014, with the Southern Association of Colleges and Schools (SACS). Upon approval by both the State Board of Education and SACS, the college will hire a full-time faculty member in spring 2014, with a doctorate in-field to administer and teach in the program. A detailed timeline is outlined in the full application.

## **C. Workforce Demand/Unmet Need Specific to Program Area**

The college conducted an analysis of regional labor market information, economic data on regional business and industry, the number of graduates produced by area educational programs, and survey data from stakeholder groups. Brevard County occupational data for allied health professions reveals 7,129 jobs available in 2012 in occupational titles related to the proposed concentration in Advanced Allied Health. The projected number of jobs in 2020 in occupations related to the proposed concentration in Advanced Allied Health is 7,370. The total projected annual openings for the Advanced Allied Health concentration is 230. The same occupational data reveals 3,860 jobs available in 2012 in occupational titles related to the proposed concentration in Biomedical Sciences. The projected number of jobs in 2018 in occupations related to the proposed concentration in Biomedical Sciences is 4,410. The total projected annual openings are 215 and the total projected openings in 2020 are 550 for the Biomedical Sciences.

In 2012 there were 1,106 graduates with some type of Healthcare Management or Biomedical Sciences degree from a regionally accredited institution in Brevard County and adjacent counties; however, only 41 students graduated from an institution in Brevard County. It can be expected that based on their student demographics, the majority of these students were not from EFSC's service district and will not stay in the district after graduation. In the past 11 years, 4009 students have graduated with an AS degree from EFSC. These graduates reflect a different demographic than the traditional college student served by the current bachelor's degree granting institutions in the region. AS degree transfer data from the 2010-2011 Florida College System, Community College Program Review Level I report revealed that of the 470 AS degree graduates from Eastern Florida State College, only 47 transferred to the State University System and none were found in a health care major.

Provided the number of degree completers remains consistent and the current job projections hold true, the current number of graduates in the Brevard region is not sufficient to keep up with the increased demand. The majority of students graduating from the BAS in Applied Health Sciences program at EFSC will obtain immediate entry into the workforce in Brevard County and surrounding areas.

By adding a BAS in Applied Health Sciences to serve EFSC's AS degree students, EFSC will fulfill an unmet need in the community and surrounding areas in various allied health fields.

## **D. Facilities and Equipment Specific to the Program Area**

EFSC will not require any new facilities for this program. Existing classrooms, conference rooms, computer labs, and administrative spaces are sufficient. The current learning management system will be used. The Cocoa campus buildings that will house the BAS program can support operations any time or day of the week. The recently renovated building 1 on the Cocoa campus has been established as the BAS building to allow day, evening, weekend and online classes. This allows the College to offer additional scheduling options to accommodate the needs of working students.

### **E. Library/Media Specific to Program Area**

EFSC supports the research and educational needs of students, faculty and staff by providing access to library resources and services consistent with the degrees offered. Full-service libraries are available at the Cocoa, Melbourne, Palm Bay, and Titusville campuses. EFSC maintains a partnership with UCF, operating joint-use libraries at the Cocoa and Palm Bay campuses. Additional print books, e-books, and other resources will be needed for the program. These additional resources will benefit both the current AA/AS degree seeker and the BAS students. The proposed budget for the BAS in Applied Health Sciences includes \$82,500 in updated library resources.

### **F. Academic Resources Specific to Program Area**

EFSC currently employs full and part-time faculty in health care and related associate degree programs that are credentialed to teach baccalaureate courses for the Applied Health Sciences program. Upon program approval, EFSC will hire a new full-time faculty member with a doctorate in an advanced health sciences related field. The primary purpose of the full-time faculty will be to teach upper-division courses and to provide overall program leadership. The college will comply with SACS Comprehensive Standard 3.7.1 credentialing guidelines for faculty teaching baccalaureate courses. As the program grows, additional faculty members will be hired to comply with this standard of academic excellence. In addition, the college foresees the need to hire an academic advisor and an administrative assistant to support upper-level students.

### **G. Cost to Students**

The estimated cost (tuition) for 120-credit hour program at EFSC is \$13,436 based on 2013-14 rates, which is considerably lower than the estimated cost for similar programs offered in EFSC's geographic region. The estimated cost for tuition and fees at UCF and FIT are \$25,268 and \$129,240, respectively.

It is important to note that students enrolled in this program will be considered for the Governor's \$10,000 Bachelor's Degree Challenge. Eastern Florida State College will offset the cost of instruction to any qualified student within this program to ensure that the student does not have to pay more the \$10,000 for tuition.

### **H. Academic Content**

The BAS in Applied Health Sciences will be an open access program. Admission criterion requires that students with an AS from a regionally accredited institution with a 2.0 grade point average (GPA). Transcripts for students with an earned AA degree from a regionally accredited institution will be reviewed for admission on a case by case basis. The Associate in Applied Science degree does not meet the admission criteria for the baccalaureate degree program. Students will work with a designated BAS advisor to build an individualized program of study based on the degree and the concentration selected. AA graduates will complete 21 credit hours of technical courses while AS graduates will have a minimum of 21 general education credit hours to complete in the final two years of the baccalaureate program.

The 60 credits of post associate-degree courses include 21 credits in general education or technical electives and 39 credit hours of upper-level coursework. Upper level course work is comprised of 6 credit hours of common core courses and 33 credit hours in an area of specialization. Graduates must also satisfy a foreign language requirement at either the secondary or postsecondary level.

This program will use multiple delivery modes including online, hybrid, and traditional face-to-face classes to serve the full and part-time student. Additionally, flexible, convenient schedules will be developed to respond to employer and students need that may include 8 and 12 week mini-mesters.

## **I. Enrollment, Performance and Budget Plan**

The first year enrollment is estimated to be 125 students with a projected 25% enrollment growth each year for the first four years. Estimated fourth year student enrollment is 244 students generating approximately 5,856 credit hours based on full-time student load of 12 credits per term.

The total budget for 2014-15 for the BAS degree, including personnel, is \$986,212. The anticipated tuition generated is \$275,370 plus an allocation of \$466,300 from the current Florida College System Program Fund appropriation. The College has committed \$224,542 from unrestricted fund balance to cover the first year expenses. In the event state funds are not available, the college has adequate revenues in its fund balance to ensure full funding of the program.

## **J. Plan of Action if Program Must be Terminated**

In the event the program enrollment, completion, and placement data indicate that the program is not viable and is to be terminated, a timeline for notification and closure consistent with college policy will be implemented. Students will be given appropriate notice and guidance to complete the program, faculty will be reassigned and SACS will be duly notified of the strategic teach-out plan for program closure.

## **EVALUATION CRITERIA**

### **A. PLANNING PROCESS**

EFSC has a 50 year history of building and maintaining partnerships with four-year universities in the service district. The college currently operates articulation agreements with the University of Central Florida (UCF), Florida Institute of Technology (FIT), Daytona State College (DSC) and several online delivery schools. After the retirement of the Space Shuttle program and resulting massive area unemployment, the Board of Trustees and college administration considered actions that might serve the community; offering baccalaureate degree programs. In August of 2013, EFSC rolled out its first BAS in Organizational Management with specializations in General Organizational Management and Healthcare Management. At first glance it may appear that the Advanced Allied Health specialization in the proposed BAS in Applied Health Sciences is similar to the Healthcare Management specialization in the BAS in Organizational Management; however, there are a number of differences that make each specialization unique. Of the 39 upper level credit hours required for each program the Advanced Allied Health student will be taking 33 upper level courses of all health related courses with an emphasis on community health and education and the option to take electives in the field of gerontology, health management or health research. Students taking the Healthcare Management specialization will only take 15 credits of upper level courses related to healthcare. The electives in the Healthcare Management specialization only emphasize health management.

## **Summary of Internal Processes and Meetings**

### **Initiation of Process**

The EFSC Board of Trustees (BOT), during the January 24, 2011 meeting, charged the college administration to research the area demand and supply for baccalaureate degrees in various disciplines and to align those degrees with the needs of area employers (Appendix A). Bachelor Degree Access Strategies, LLC was contracted to design student and employer surveys and assess the results as part of the subsequent actions prescribed from the January BOT meeting. The minutes of the Board of Trustees, and UCF meetings are located in Appendix A and B, respectively. Other input from college administrators, faculty and staff was discussed at the Steering Committee, and Curriculum and Student Services Subcommittees meeting. The minutes of these committee meetings are located in Appendix in E, F, and G respectively.

## Student Survey

To establish need from the perspective of prospective students the college conducted an online survey of current students from March 21-April 21, 2011. The full student survey is located in Appendix M; the results are summarized in Table 1.

**Table 1**  
**Summary of Student Survey**

Question	Response
<b>Are you in favor of four year programs?</b>	92% affirmative
<b>Would you continue your education at Eastern Florida State College if four-year degrees were available?</b>	85% affirmative
<b>What method of instruction would you prefer?</b>	73% hybrid
<b>How many of the campuses should offer baccalaureate degrees</b>	66% all four campuses
<b>What area should you study at the baccalaureate level?</b>	55% health-related and business

During the June 2011 Board of Trustees meeting Dr. Tom Furlong, president of Bachelor Degree Access Strategies, LLC, offered the results of the survey during his presentation on Four-Year Degree Programs Needs Assessment.

## Board Review of Occupational Data

College administration researched Florida Research and Economic Database occupational lists in Brevard and recommended to the Board of Trustees that the College choose the new programs based on the projected workforce placements. Immediate unmet needs for four-year programs were identified in Brevard and surrounding areas in allied health related fields. Input from advisory committees indicated a need for more specific degrees to increase the competencies of current healthcare providers. Thus this concentration was developed to enhance the clinical competencies of our providers in the local healthcare community. The second area of concentration was developed to add more scientific knowledge as a base for students with limited healthcare backgrounds.

## Board Decision to Seek Permission to Establish BAS Degree

College President James Richey summarized the history of the BAS exploration at the March 15, 2012 Board of Trustees meeting. He stated that the college surveyed current students to establish interest, identified the need for specific BAS programs, surveyed employers to establish need. Dr. Richey conferred with other area educational institutions' administrators to establish their support of the College offering specific BAS programs. Based on the research results, it was determined that the BAS in Organizational Management would be the first four-year degree offered at EFSC. College administrative personnel noted that offering a four-year degree that met local workforce needs aligned with the EFSC mission. The Board of Trustees voted unanimously to apply to SACS and the Florida Department of Education for permission to establish the first BAS program (Appendix A). Additionally, Dr. Richey recommended that additional BAS programs would follow in the coming years. On March 18, 2013, the Board of Trustees approved the additional BAS programs to be offered at EFSC based on data obtained in a second employer survey.

## Summary of External Processes and Meetings

### Area Employer Survey

Initially the Office of Planning and Assessment developed two Zoomerang surveys to gauge local business' interest in the availability of four-year degrees at the College. The survey was sent to approximately 3,700 employers from January 11, 2012 to February 2, 2012. Respondents included 109 employers, 26 from the field of healthcare and 83 from companies representing a variety of fields

outside of healthcare. The College, with the assistance of Brevard Workforce Development, completed a second survey in 2013 of the business and industrial communities regarding the postsecondary educational opportunities that these companies would like for Brevard Community College to consider offering so that the companies could address their employment needs. While reviewing the results, the College found several important factors: 1) The College had greater participation in the number of businesses and industries compared to last year's survey; 2) The College had a statistically significant cross-section of the types of industries participating in the survey; and, 3) The College had a significant cross-section of the sizes of the businesses, which ranged from very small employers to companies with a workforce exceeding 250 employees. The survey represented approximately 15,000 employees who are employed by these organizations which represents a sample of approximately 6 percent of the workforce in Brevard County. This is slightly larger than last year's sample. The College also researched the Florida Targeted Occupational list for Brevard County for 2012 and 2013. This survey explored the possibility of adding the BAS in Applied Health Sciences with a specialization in Advanced Allied Health and Biomedical Sciences and other areas of concentration.

The College has in place Associate degrees and other certification programs that align perfectly with these Bachelor's degrees. This alignment will give additional training and educational opportunities to the College's current students, as well as those working adults who wish to advance their careers.

Based on the survey data and other information the Board of Trustees approved the addition of the B.A.S. in Applied Health Sciences, with specializations in Allied Health Sciences and Biomedical Sciences tracks.

The full survey results for 2012 and 2013 are located in Appendix N1 & N2. Additionally, employer support is evident in the letters of support in Appendix O.

**Documented Employer Interest in BAS Degree Programs**

One of the questions asked of the participants in the 2013 survey was: "Does your company have jobs that require a minimum of a Bachelor's Degree in anyone of these related fields?" In this facet of the data-gathering process, each of the above fields was set apart separately. The results were as follows:

- 1) 31 percent - Yes for jobs with a minimum of a Bachelor's degree in Public Safety Management.
- 2) 40 percent - Yes for jobs with a minimum of a Bachelor's degree in Sales and Marketing Management.
- 3) 52 percent - Yes for jobs with a minimum of a Bachelor's degree in the combined fields of Applied Health Sciences.
- 4) 84 percent - Yes for jobs with a minimum of a Bachelor's degree in the combined fields of Applied Information Systems.

Results are found in Table 2.

**Table 2**

**Future Baccalaureate Needs of Area Companies (2013 Survey)**

<b>Survey Question: Does Your Company Have Jobs That Require A Minimum of a Bachelor's Degree In Anyone of These Related Fields?</b>	<b>Agree</b>
BAS of Public Safety	31%
BAS of Sales and Marketing	40%
In BAS of Applied Health Sciences	52%
BAS of Applied Information Systems	84%

The participants in the 2013 survey were also asked, "What is the number of anticipated annual job openings in these fields?" A significant majority of the respondents (65 percent) stated they do not have a pool of qualified candidates to actually fill these jobs.

Data gathered during the survey process showed that the average annual salary in Applied Health Science is approximately \$50,000. The data also showed that there will be job growth in these fields. Table 3 represents the future needs of healthcare companies in Brevard County based on the 2012 survey.

**Table 3  
Future Needs of Healthcare Companies (2012 Survey)**

Survey Statement	Agree- Strongly Agree
The need for college graduates will grow in the next 5 years	52%
We have difficulty finding applicants with the knowledge, expertise and educational background needed.	39%
In the next 3-5 years a 4-year degree in Nursing as offered by Eastern Florida State College will be an important consideration in our hiring decisions.	29%
In the next 3-5 years a 4-year degree in Health Care Administration as offered by Eastern Florida State College will be an important consideration in our hiring decisions.	37%
Our company would be interested in hiring graduates of a Eastern Florida State College Nursing program.	45%
Our company would be interested in hiring graduates of a Eastern Florida State College Health Care Administration program.	32%

**Outcome of Discussions with UCF about Applied Health Sciences Degree**

The University of Central Florida supports EFSC developing a Bachelor of Applied Science degree in Biomedical Science and Advanced Allied Health. EFSC sent the notice of the courses in the proposed BAS degrees after discussion with the Board of Trustees and after the submission of a letter of intent to the Florida Department of Education. Verbal discussions with UCF officials about the proposed programs have taken place. A formal meeting with the Provost and Vice Provost from UCF and the EFSC Vice President for Planning and Assessment, Dr. Linda Miedema was initiated 10/11/2013. The summary of this meeting is in Appendix B. At this meeting, the UCF Provost and Executive Vice President of Academic Affairs, and Vice Provost, Regional Campuses, met with EFSC Vice President for Planning and Assessment to discuss the EFSC’s proposal for the BAS in Applied Health Sciences with concentrations in Biomedical Science and Applied Health Sciences. The outcomes of the meeting resulted in the UCF leadership supporting EFSC’s proposed programming as evidenced in Appendix B.

EFSC senior leadership also met with the President and Leadership Council from DSC. The Presidents addressed the articulation of EFSC’s AS degree students to DSC. At that time, DSC offered its support of EFSC pursuing a BAS. A letter of support from DSC to EFSC is attached in Appendix O.

College leadership also collaborated with FIT senior officials to gain support of the EFSC BAS degree by providing research and evidence of the unmet need in Brevard. A letter of support from FIT to EFSC is attached in Appendix O.

**Southern Association of Colleges and Schools (SACS)**

On April 30, 2012 EFSC submitted a formal Letter of Notification to SACS with a full Substantive Change Prospectus submitted on September 15, 2012 for SACS Board of Trustee review in December 2012. A Letter of Notification of Substantive Change for Accredited Institutions (for the addition of the BAS Applied Health Sciences) will be filed no later than May 15, 2014 with the Southern Association of Colleges and Schools (SACS), three months prior to the start of the program. SACS has conducted on onsite review of the current BAS program with no recommendations. Formal documentation of the approval is forthcoming.

**B. PROGRAM IMPLEMENTATION TIMELINE**

**Dates for Program Implementation Activities**

The following table illustrates the date or date range for the requested implementation activities.

**Table 4**  
**Bachelor of Applied Science in Applied Health Sciences**  
**Program Implementation Timeline**

Activity	Date or Date Range
Assessment of Need and Demand	<ul style="list-style-type: none"> <li>• January 24, 2011 Board of Trustees requests that the College administration research local supply and demand for baccalaureate degrees in various disciplines.</li> <li>• January 2011-September 2012 On-going assessment of area projection of employment needs is conducted.</li> <li>• March-April 2011 Entire student body is invited to complete online survey.</li> <li>• January 2012 Area employers invited to complete online survey.</li> </ul>
Curriculum Development	<ul style="list-style-type: none"> <li>• July-October 2013 Faculty Liaison for Curriculum Development continues planning phase</li> <li>• October-November 2013 Initial Steering Committee meeting is held and two subcommittees are formed: Curriculum and Student Services.</li> <li>• October-November 2013 Curriculum Development Committee (CDC) meetings to develop program learning outcomes, program of study and course development schedule.</li> <li>• October-November 2013 Student Services Committee meetings to develop admissions/completion requirements.</li> <li>• November 2013 Curriculum is presented and changes recommended to CDC.</li> <li>• September 2013-February 2014 Course refinement, textbook selections, online courses developed. Program approved through the EFSC Academic Affairs Council.</li> </ul>

Accreditation Activities	<ul style="list-style-type: none"> <li>• August 2013 Notice of Intent is filed with Florida Department of Education</li> <li>• February 2014 Notice of Intent is filed with SACS.</li> <li>• March 2014 Proposal is submitted to the Commissioner and Chancellor</li> <li>• May 2014 SACS Substantive change prospectus is submitted.</li> <li>• January 2015 SACS follows-up substantive change request with site visit.</li> </ul>
Recruitment of Faculty and Staff	<ul style="list-style-type: none"> <li>• April 2014 Assessment of faculty roster for current credentialed faculty for BAS in Applied Health Sciences.</li> <li>• April-May 2014 Department submits additional faculty and staff positions to support the Degree. Faculty and staff are recruited and hired.</li> </ul>
Systems, Facilities and Resource Upgrades and Development	<ul style="list-style-type: none"> <li>• Spring 2014 Purchase of additional library materials.</li> <li>• February-May 2014 Submit additional resources needed for library/learning resources through the budget process.</li> <li>• November 2014 Review facility upgrades needed for subsequent years and projected growth.</li> </ul>
Student Recruitment and Advising	<ul style="list-style-type: none"> <li>• August 2013-January 2014 Marketing plan for the BAS degree is developed and launched. Brochures and other marketing materials are designed and produced.</li> </ul>
Estimated date upper division courses are to begin	<ul style="list-style-type: none"> <li>• August 2014</li> </ul>

### **Committee Structure**

Following the submission of the Letter of Intent and notification to DFC, the College engaged a Steering Committee for program development and implementation. The Steering Committee, comprised of faculty, staff and administration, established two subcommittees: Curriculum, and Student Services. The committee membership and the program of study are Appendix D and I. In addition to the program of study, the committees approved program learning outcomes linked to EFSC Core Abilities (general education outcomes) and mapped to the appropriate course for outcome assessment (Appendix K). All committee minutes are included in Appendix E, F and G.

### **C. WORKFORCE DEMAND/UNMET NEED SPECIFIC TO PROGRAM AREA**

#### **Geographic Region**

Eastern Florida State College serves the 72 miles of Florida’s Space Coast, Brevard County, Florida. Brevard is designated as Workforce Region 13.

#### **Number of Current Jobs, Projected Jobs, and Annual Job Openings**

The employment data cited in Table 5a and 5b for occupations related to the proposed degree in Applied Health Sciences were obtained from Economic Modeling Specialists, Inc. (EMSI) Strategic Advantage product. Employment projections were derived using an 8-year time period (2012-20) and EMSI’s Complete Employment database (2<sup>nd</sup> quarter 2012 dataset). EMSI data is a compilation of 92 government and private-sector databases, including the Florida Department of Economic Opportunity. The dataset covers the entire US population and economy and includes data for industries, occupations, demographics, postsecondary institutions, and selected economic indicators. The full labor market report is attached in Appendix L.

Using an educational-level filter equal to a bachelor's degree or bachelor's degree plus experience, Brevard County occupational data for allied health professions reveals 7,129 jobs available in 2012 in occupational titles related to the proposed concentration in Advanced Allied Health. The projected number of jobs in 2020 in occupations related to the proposed concentration in Advanced Allied Health is 7,370. The total projected annual openings for the Advanced Allied Health concentration is 230. The same occupational data reveals 3,860 jobs available in 2012 in occupational titles related to the proposed concentration in Biomedical Sciences. The projected number of jobs in 2018 in occupations related to the proposed concentration in Biomedical Sciences is 4,410. The total projected annual openings is 215 and the total projected openings in 2020 is 550 for the Biomedical Sciences.

**Table 5a**  
**Employment Data for Occupations Linked to Advanced Allied Health**  
 (2012-2020)  
 Brevard County

Occupation Title (SOC Code)	Employment		Openings	
	2012	2020	Annual % Change	Average Annual
Chief Executives (11-1011)	366	377	0.38 %	10
General/Operations Managers (11-1021)	1,738	1,793	0.40%	38
Sales Managers (11-2022)	314	324	0.40%	10
Public Relations Managers (11-2031)	23	26	1.63%	1
Administrative Services Managers (11-3011)	277	311	1.53%	10
Training and Development Managers (11-3131)	28	28	0.00%	1
Food Service Managers (11-9051)	555	557	0.05%	10
Medical and Health Services Managers (11-9111)	199	238	2.45%	10
Health Educators (21-1091)	97	128	3.99%	6
First-Line Supervisor of Office and Administrative Support Workers (43-1011)	2,012	2,277	1.65%	86
First-Line Supervisors of Non-Retail Sales Workers 41-1012	611	623	0.25%	17
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products 41-4011	909	987	1.07%	31
<b>TOTAL</b>	<b>7,129</b>	<b>7,370</b>	<b>1.16%</b>	<b>230</b>

Source: <http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>  
 Florida Department of Economic Opportunity. Accessed January 2013

**Table 5b**  
**Employment Data for Occupations Linked to Applied Health Sciences, Biomedical Science**  
**(2012-2018)**  
**Brevard County**

<b>Occupation Title (SOC Code)</b>	<b>2012 Jobs</b>	<b>2018 Jobs</b>	<b>Annual Openings</b>	<b>Total Projected Openings</b>
Animal Scientists (19-1011)	36	40	3	4
Food Scientists and Technologists (19-1012)	41	48	3	7
Biological Scientists (19-1020)	768	873	40	105
Biochemists and Biophysicists (19-1021)	296	357	20	61
Microbiologists (19-1022)	95	112	6	17
Zoologists and Wildlife Biologists (19-1023)	263	277	9	14
Epidemiologists (19-1041)	14	17	1	3
Medical Scientists, Except Epidemiologists (19-1042)	731	904	40	173
Miscellaneous Life Scientists (19-1099)	38	43	6	5
Agricultural and Food Science Technicians (19-4011)	69	73	3	4
Biological Technicians (19-4012)	298	349	21	51
Chemical Technicians (19-4030)	353	371	10	18
Environmental Science and Protection Technicians, Including Health (19-4091)	317	352	21	35
Life, Physical, and Social Science Technicians, All Other (19-4099)	428	467	27	39
<b>Total for all Related Occupations</b>	<b>3,860</b>	<b>4,410</b>	<b>215</b>	<b>550</b>

Source: EMSI Complete Employment – 2013

**Graduates from Eastern Florida State College**

Analysis of completion data from EFSC’s AS degrees for the past 11 years, shown in Table 6, highlights the potential enrollment for the BAS degree.

**Table 6**  
**EFSC Associate in Science History of Graduates**

<b>Year</b>	<b>AS Graduates</b>
<b>2012-13</b>	453
<b>2011-12</b>	445
<b>2010-11</b>	441
<b>2009-10</b>	378
<b>2008-09</b>	371
<b>2007-08</b>	319
<b>2006-07</b>	300
<b>2005-06</b>	303
<b>2004-05</b>	329
<b>2003-04</b>	345
<b>2002-03</b>	325
<b>Total</b>	<b>4,009</b>

**Graduates from State University Institutions**

The recent number of graduates in the proposed Applied Health Sciences degree (51.2211) and four other related CIP codes for the State University in Brevard’s service district, UCF, are shown in Table

7. Of the ten UCF Regional campuses eight are outside of EFSC’s service district. While the degrees may seem similar by discipline, they use different CIP codes and different common

prerequisites.

**Table 7**  
**Recent Graduates in the Discipline Area**  
**State University System**

Program and CIP Code	University of Central Florida Graduates 2012
Health/Healthcare Administrations/Management, Allied Health and medical Assisting Services, Other (CIP 51.0701)	263
Hospital and Health Care Facilities, Administration/Management (CIP 51.0702)	0
Health Information/medical Records, Administration/Administrator (CIP 51.0706)	37
Nursing Administration (CIP 51.3802)	0
Biomedical Sciences, General (26.0102)	4
Medical Microbiology and Bacteriology (26.0503)	291
Biology/Biological Sciences, General (26.0101)	278
Chemistry, General (40.0501)	25
Biotechnology (26.1201)	24
<b>Total</b>	<b>922</b>

Source: EMSI 2013

The 922 UCF graduates are inclusive of all UCF campuses including the main campus and eight regional campuses not in Brevard's same district.

**Graduates from Nonpublic Postsecondary Institutions**

The recent number of graduates in the two CIP codes related to the proposed degree in Applied Health Sciences from regionally accredited Nonpublic Postsecondary Institutions is shown in Table 8. Letters of support from FIT and DSC are found in Appendix O.

**Table 8a**  
**Recent Graduates in the**  
**Discipline Area**  
**Nonpublic Postsecondary**  
**Institutions**

<b>Program and CIP Code</b>	<b>Florida Institute of Technology Graduates (2010-11)</b>	<b>Everest, Melbourne &amp; South Florida &amp; North Orlando</b>	<b>University of Phoenix-Central Florida Campus</b>	<b>Stetson University</b>
Health/Healthcare Administrations (CIP 51.0701)	0	25	0	0
Operations Management and Supervision (CIP 52.0205)	0	0	27	0
Health Care Facilities Management (CIP 51.0702)				
Business Administration Management (CIP 52.0299) Health Information Administration (CIP 51.0706)		0	0	0
Nursing Administration (CIP 51.3802)	0	0	0	0
<b>Total</b>	0	25	27	0

**Table 8b**  
**Recent Graduates in the**  
**Discipline Area**  
**Nonpublic Postsecondary**  
**Institutions**

<b>Program and CIP Code</b>	<b>Florida Institute of Technology Graduates (2010-11)</b>	<b>Adventist University of Health Sciences</b>	<b>Rollins</b>	<b>Stetson University</b>	<b>Bethune-Cookman</b>
Biomedical Sciences, General (26.0102)	11	14	0	0	0
Biology/Biological Sciences, General (26.0101)	2	0	13	15	18
Chemistry, General (40.051)	4	0	7	9	9
Molecular Biology (26.0204)	11	0	0	4	0
Biochemistry (26.0202)	9	0	9	6	0
<b>Total</b>	37	14	29	34	18

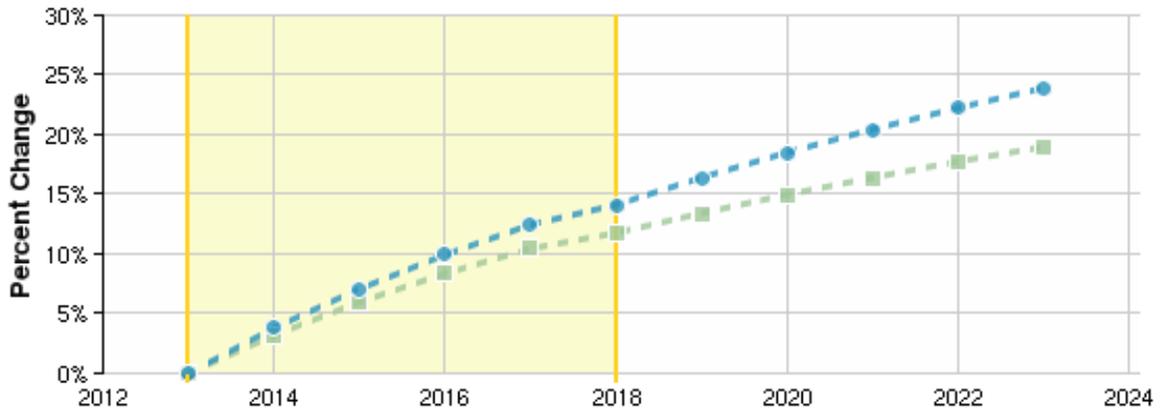
Source: EMSI

Of the graduates listed in Table 8a and 8b, only 41 graduates were produced in Brevard County.

### The Employment Gap

The regional growth rate (Brevard County), state growth rate, and national growth rate Medical and Health Services Managers (11-3131) are also shown in Figure 1a. This figure shows Brevard’s growth rate for these occupations is 18% and outside of Brevard County is 24%. The regional growth rate (Brevard County), state growth rate, and national growth rate for Medical Scientists, except Epidemiologists are shown in Figure 1b. This figure shows Brevard’s growth rate for these occupations is 49% and outside of Brevard County is 40.05%.

**Figure 1a**  
**Regional Growth Rate Data for Medical and Health Services Managers-(11-3131)**  
**(2013-2023)**



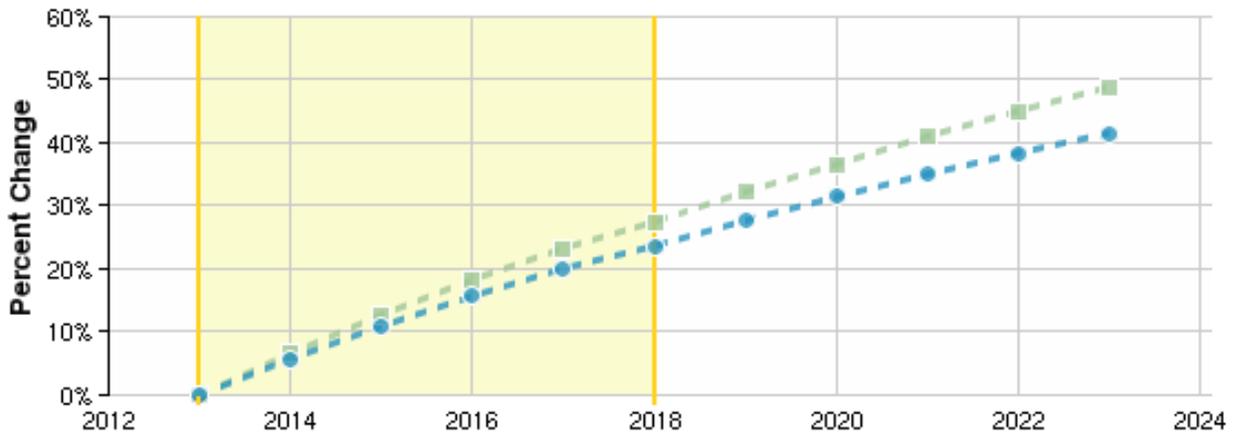
Region	% Change
● Brevard/surrounding	24.0%
■ ● Brevard County Only	18.0%

Source: Economic Modeling Specialists International

[www.economicmodeling.com](http://www.economicmodeling.com)

Brevard County is represented by the green squares and the blue circles represent Brevard’s surrounding areas.

**Fig 1b**  
**Regional Growth Rate Data for Medical Scientists, Except Epidemiologists (2013-2018)**



Region	% Change
● Brevard/surrounding	40.05%
■ ● Brevard County Only	49.0%

Source: Economic Modeling Specialists International

[www.economicmodeling.com](http://www.economicmodeling.com)

Brevard County is represented by the green squares and the blue circles represent Brevard's surrounding areas.

Tables 7 and 8 above show that in 2012 there were 1,106 graduates with some type of Healthcare Management or Biomedical Sciences degree from a regionally accredited institution in Brevard County and adjacent counties; however, only 41 students graduated from an institution in Brevard County. It can be expected that based on their student demographics, the majority of these students were not from EFSC's service district and will not stay in the district after graduation. AS degree transfer data from the 2010-2011 Florida College System, Community College Program Review Level I report revealed that of the 470 AS degree graduates from Eastern Florida State College, only 47 transferred to the State University System and none were found in a health care major.

Provided the number of degree completers remains consistent and the current job projections hold true, the current number of graduates in the Brevard region is not sufficient to keep up with the increased demand. The majority of students graduating from the BAS in Applied Health Sciences program at EFSC will obtain immediate entry into the workforce in Brevard County and surrounding areas.

### **Other Measures Considered**

The employment gap discussed does not take into account a number of other notable factors.

- By limiting data to jobs with an entry level of at least a bachelor's degree several large area employers bachelor's demand is not captured. Support letters from health agencies demonstrate that although often a bachelor's degree is not required for entry, it is required for career advancement. Health care employers expressed the need for accessible, affordable higher education for employees.
- The employment data for the BAS only reflects openings in areas linked to the occupational code for Healthcare Management and Administration, yet according to the Economic Development Commission of Florida's Space Coast labor market demographics 14% of Brevard's employment is in Education and Health. These area employers, such as Health First, expressed the need for managers with significant technical and management skills.
- According to the City Manager for the City of Cocoa, the community surrounding the Cocoa Campus, only 15.2% of residents over the age of 25 possess a bachelor's degree. The BAS will provide access to higher education to some of the most economically distressed neighborhoods in Brevard.
- Graduates with an AS degree in Medical Technology who complete the BAS in Biomedical Science, Biotechnology track, from EFSC will be eligible to sit for the national board certification exam for the medical laboratory scientist from the American Society of Clinical Pathologists (ASCP) qualifying them for higher paying jobs, such as clinical laboratory supervisor, and will fulfill a growing need in the medical technology field.

## **D. FACILITIES AND EQUIPMENT SPECIFIC TO PROGRAM AREA**

### **Existing Facilities/Equipment**

This BAS program will use multiple delivery modes including online, hybrid, and traditional face-to-face classes as well as flexible, convenient 8 and 12 week schedules to serve the full and part-time student. Existing classrooms, conference rooms, computer labs, and administrative spaces are sufficient. The additional science laboratory space needed to accommodate programmatic special requirements has been identified. Additional laboratory equipment will be needed for the upper level science courses. Initially, the courses will be offered on the Cocoa and Melbourne campuses with the administrative offices located in Cocoa. Both the assigned full time faculty and the advisor will travel to the Melbourne campus to meet students as needed. The Melbourne campus recently completed renovations to a classroom building that includes 30 classrooms and labs with advanced multi-media teaching capabilities. Additionally, the Cocoa campus opened the Science, Technology, Engineering

and Math (STEM) Annex with a 32 seat computer lab and an open, collaborative learning environment. In addition to the STEM Annex, BAS courses will also be offered in Building 1 on the Cocoa Campus. These two buildings are not a part of the general electrical grid for the campus and can be open for operation any day of the week without jeopardizing the college’s energy conservation initiative. This will allow the College to explore additional scheduling options to accommodate the needs of full-time working students that may include a “weekend college” concept. The BAS program will have access to these facilities as well as other classroom space on both campuses.

**New Facilities/Equipment Needed**

EFSC does not require any new facilities for this program. Additional laboratory equipment will be needed for the upper level science courses. The current learning management system will enrich learning as online companions for traditional face-to-face courses and serve as the platform for the hybrid and full online courses. An annual review of the schedule and the classroom availability will be conducted with the Associate Vice President of Facilities to ensure students have a high quality learning environment as the program grows.

**E. LIBRARY/MEDIA SPECIFIC TO PROGRAM AREA**

**Existing Library/Media Resources**

EFSC supports the research and educational needs of students, faculty and staff by providing access to library resources and services consistent with the degrees offered. Full-service libraries are available at the Cocoa, Melbourne, Palm Bay, and Titusville campuses. EFSC maintains a partnership with UCF, operating joint-use libraries at the Cocoa and Palm Bay campuses. Existing resources relevant to the advanced allied health degree include 1,511 print books, 346 eBooks, 233 DVDs, over 3,420 streaming media titles, 12 e-Journal subscriptions, and access to 6,847 full-text journal titles available from four online databases, as illustrated in Table 9.

**Table 9  
Count of Existing Resources Supporting the BAS in Applied Health Sciences**

Program	Print & Media (Cocoa)		Print & Media (Melbourne)		Electronic				
	Books	DVDs	Books	DVDs	eBooks	Streaming Media	Databases	e-Journal Subscriptions	Full-Text Journals
Biomedical Concentration	767	99	477	94	1,169	3,120	8	9	3,977
Advanced Allied Health Concentration	165	23	102	17	230	300	4	3	2,873

All students have access to streaming media, e-Journal subscriptions, online databases, eBook collections, and online library instruction tutorials. Through a statewide reciprocal borrowing agreement, students and faculty also have access to library materials from Florida public colleges and universities, as well as materials from other libraries via interlibrary loan.

**New Library/Media Resources Needed**

Librarians consulted standard collection development resources (e.g., *Doody’s Core Titles in the Health Sciences, Resources for College Libraries*, etc.) and other Florida public colleges or universities offering an allied health or health sciences bachelor degree to identify additional resources needed to support the BAS. Existing resources were selected to support lower level 2-year programs, so additional upper level curriculum support materials will be needed. The proposed start-up budget for the BAS in Applied Health Sciences includes \$82,500 in updated library resources for 2014-15, to be approved by the program faculty. For subsequent academic years, \$72,500 is projected for e-Journal subscriptions annual license renewals and for adding newly published books, eBooks, and media. The needed materials and the start-up costs are outlined in Table 10. An additional capital outlay of \$7,000 to purchase books and materials is also included in the budget but is not a part of operating expenses.

**Table 10  
New Library Resources Needed for the BAS in Applied Health Sciences**

<b>Start Up Resources</b>	<b>Estimated Cost</b>
Print Books	\$4,500
eBooks	\$1,500
Print Media	\$ 500
Streaming Media	\$ 500
e-Journal subscriptions *	\$37,500
Databases	\$38,000
<b>Total Start Up Costs</b>	<b>\$82,500</b>
*recurring cost	

**F. ACADEMIC RESOURCES SPECIFIC TO PROGRAM AREA**

**Number of existing full-time faculty**

EFSC currently employs full and part-time faculty members in nursing, health sciences, science and related associate degree programs that are credentialed to teach baccalaureate courses for the Applied Health Sciences program. Upon program approval, EFSC will hire a new full-time faculty member with a doctorate in an appropriate applied health sciences related field. The primary purpose of the full-time faculty will be to teach upper-division courses and to provide overall program leadership. The college will comply with SACS Comprehensive Standard 3.7.1 and 3.5.4 guidelines for faculty teaching baccalaureate courses and the percentage of discipline course hours taught by faculty members holding the terminal degree. As the program grows, additional faculty members will be hired to comply with this standard of academic excellence. By 2016, the College projects a need for another full time faculty to support the program growth. In addition, the college plans to hire an academic advisor and a part-time administrative assistant to support upper-level students.

Table 11 lists existing full and part-time faculty who currently are credentialed to teach lower-division courses but who also qualify to teach upper-division coursework for the proposed baccalaureate degree.

**Table 11**  
**Existing Full-time and Part-time**  
**Faculty**

<b>Name</b>	<b>Status</b>	<b>Degree Credentials</b>
Arevalos-Eddy, Carla	Full-Time	MS Health Science-University of Central Florida BS-Health Information –University of Central Florida
Armstrong, John	Full-Time	MS-Biology-college of Saint Rose BS-Biology-SUNY Albany
Babb, Kathinka	Part-Time	DHed-Health Education-A.T. Still University DDS-Doctor Dental Surgery- UMKC School of Dentistry D-ABOMP-Board Certification Oral & maxillofacial Pathology- University of Florida & Shands Hospital BS-Biology-Virginia Tech
Bobik, Constance	Full-Time	MS-Nursing-University of Maryland BSN-Nursing-Barry University
Bottesch, James	Full-Time	MS-Biological Science-Florida Institute Technology
Bowers, Jeannette	Full-Time	MSN-University of Phoenix BSN-University of Central Florida
Brown, Billie	Full-Time	MS-Biology-Florida Institute Technology BS-Biology- Florida Institute Technology
Brown, Wayne	Full-time	MS - Health Services Management - Florida Institute of Technology
Burger, Janice	Full-Time	MS-Biology- University of Saint joseph
Campbell, Susan	Full-Time	MHAE-University of Phoenix BSHA-University of Phoenix
Carr, Michelle	Full-time	MSN- Barry University BSN- Barry University
Comerford, Jason	Part-Time	DC-Palmer College
Connaughton, Dennis	Full-Time	DMD-University of Florida
DeCoteau, Melodee	Full-Time	MA- Environmental Studies-Skidmore College BA-Biology-SUNY at Potsdam
Earle, Laura	Full-Time	DVM-University of Florida MPH-University of Florida BS-Microbiology and Cell biology
Eaton, Deborah	Full-Time	MS-Nursing Walden University BSN-University of Central Florida
Fodor, Lynette	Part-Time	MPH-Public Health-Nova Southeastern university BS-Applied Professional Studies-Nova Southeastern University
Francis, Esther	Part-Time	MS - Health Science - University Of Central Florida
Hartery, Mark	Part-Time	BS - Health Services Administration – University of Central Florida
Hickman, Deborah	Part-Time	DO-AT Still University
Abdel-Hady, Hany	Part-Time	MD-AI Azhar University
Howell, Paulette	Full-Time	MSN-University of Phoenix BS-Nursing-Adelphi University
Hunsinger, Gary	Full-Time	MSN-Walden University BSN-University of Massachusetts-Dartmouth
Hurley, Patricia	Full-Time	MSN Walden University BSN- University of Kentucky
Iannotti, Donna	Full-Time	PhD-Chemistry- The University of Akron

Leichty, Melissa	Full-Time	PhD-Biology-Florida Institute Technology MS-Biology- Florida Institute Technology
Lanza, Sandy	Full-Time	BS-Health Services Admin-University of Albuquerque AAS-Radiography-Amarillo College
McMurtrie, Chrisitine	Full-Time	MSN-University of Maryland-Baltimore BSN-University of Maryland-Baltimore
NcNally, Theresa	Full-Time	MSN-Gwynedd-Mercy College BS-Neuman College
Miedema, Linda	Part-Time	PHD - Leadership for Higher Ed - Capella University MSA - Nursing Administration - Madonna University
Miller, Gretchen	Full-Time	MS-medical Sciences- University of Florida BS-Medical Technology-Indiana University of PA
Miller, Arlene	Part-Time	MHS - Health Science - Armstrong Atlantic State University
Moisii, Cristina	Full-Time	PhD-Inorganic Chemistry-Florida State University
Montes-Jordan, Victor	Part-Time	MD-University of Madrid
Nasr, Giesel	Part-Time	MD-St Joseph University
Ojwang, Joshua	Full-Time	PhD Chemistry-Boston University
Picchi, Amy	Full-Time	MS-Biology- Florida Institute Technology
Pino, Paula	Full-Time	MS-Nursing-Kaplan University BSN-University of Central Florida
Piva, Susan	Full-Time	MS-Nursing-Adelphi University BS-Nursing-Adelphi University
Pollard, Robin	Full-Time	MSN University of Central Florida BSN University of Central Florida
Riddle, Alyce	Full-Time	MSN-University of Phoenix BS- Nursing-University of Florida
Sikora, Janet	Part-Time	DC-NY Chiropractic College
Simpson, Corida	Full-Time	MSN-CUNY Hunter College BSN-CUNY Medgar Evers College
Sheehan, Susan	Full-Time	MS Health Services management- Florida Institute of technology BS-Radiological Science-University of Central Florida
Stetson, Rosemary	Full-Time	MS-Nursing-Wagner College BSN-Nursing-CUNY Hunter College
Stuery, Elinda	Full-Time	MSN-University of Central Florida BSN-University of Central Florida
Thompson, Jeanette	Full-Time	MSN-University of Phoenix BSN-University of Phoenix
Walker-Adams, Arlene	Full-Time	EDD-Education-Nova Southeastern University MS - Nursing Administration - Adelphi University
Yount, James	Full-Time	PhD-Science Education- Florida Institute Technology
Zuvich, Tatiana	Full-Time	PhD Chemical Engineering-Academy of Science

### **Additional Faculty**

The College is fortunate to currently have one full-time faculty, one current adjunct and two college administrators that hold appropriate credentials in the discipline to meet the needs of the program credentialing requirement. To maintain a 1:30 faculty to student ratio expected by our community college students, the College will hire one new doctoral level full-time faculty member by April 2014 and another by the third year. The initial faculty will also serve as Program Manager for the program once approval has been granted by the State Board of Education and SACS. To augment

the full-time faculty, current adjuncts and other credentialed full-time faculty will be recruited to teach as adjuncts. As the program grows, analysis will be conducted to maintain reasonable and expected student to faculty ratios.

**Anticipated Instructional Support Personnel**

As indicated, the college will supplement the new full-time faculty to serve as the Program Manager for the Applied Health Sciences program. In this role the faculty will schedule courses, interview adjuncts, and review credentials in coordination with the Vice President of Academic Affairs. Outlined in the *Enrollment, Performance and Budget Plan* is the College’s intent to hire a full time student advisor by April 2014 dedicated to serving the BAS students from admission through completion. Initially, existing library staff will suffice; as the program grows an adjunct librarian will be hired as outlined in the *Enrollment, Performance and Budget Plan*. In addition, the College will support the BAS department with a part-time Administrative Assistant to work with the Program Manager and the Advisor.

**Additional Information Related to Academic Resources**

No additional academic resources are needed for this program.

**G. COST TO STUDENTS**

**Estimated Four-year Cost at FCS Institution**

The estimated cost (tuition a) for 120-credit hour program at EFSC is \$13,436 based on 2013-14 rates. This cost is based on current tuition and fees for an AS/AA degree and an estimate of tuition and fees for the upper division coursework where 21 of the 60 credits required for the BAS degree will be charged at the lower division rate. The fees used for this calculation include financial aid, student activity, capital improvement, technology, and proportionate distance learning fees.

It is important to note, that although the table below reports anticipated student tuition, this program will be part of the Governor’s \$10,000 Bachelor Degree Challenge. Eastern Florida State College will defray the costs of all qualified students accepted into this program above \$10,000 in tuition costs.

**Table 12  
Breakdown of Anticipated Student Tuition for the BAS Program**

<b>EFSC Bachelor of Applied Science Degree tuition (No Fees):</b>		
Lower division:	60 credit hours x \$104.00/credit hour	= \$6,240
Upper division:	21 credit hours x \$104.00/credit hour	= \$2,184
Upper division:	39 credit hours x \$128.51/credit hour	= <u>\$5,012</u>
<b>Total estimated cost:</b>		<b>\$13,436</b>

**Estimated Cost for State University in Service District**

The estimated cost for four years of study at the state university in the service district, UCF-Brevard Campus, is summarized in Table 13. The estimate reflects the 2012-13 tuition and fees posted online at <http://tuitionfees.smca.ucf.edu> by UCF for baccalaureate programs related to the EFSC proposed BAS program.

**Table 13**  
**Estimated 2012-13 Four-Year Cost of Study**  
**State University in EFSC Service District**

<b>Institution</b>	<b>Tuition &amp; Fees (per credit)</b>	<b>Four-year Cost (120 credits)</b>
<b>University of Central Florida</b>	\$210.57	\$25,268

Source: University of Central Florida Tuition and Fees: <http://tuitionfees.smca.ucf.edu/>

**Estimated Cost for Non-public Institution in Service District**

The estimated tuition and fees is included in Table 14 for four years of study at one non-public institution with operations in Brevard’s service district, Florida Tech. Florida Tech calculates tuition and fees for a full-time student for a semester taking 12-19 credit hours. The tuition and fees below are based on an average of 15 credit hours per term to complete a 120 credit hour program in a non-engineering field at Florida Tech.

**Table 14**  
**Estimated 2012-13 Four-Year Cost of Study**  
**Nonpublic Institution in EFSC Service District**

<b>Institution</b>	<b>Tuition &amp; Fees (per credit)</b>	<b>Four-year Cost (120 credits)</b>
<b>Florida Institute of Technology</b>	\$16,155 per term for 12-19 credits	\$129,240

Source: Florida Institute of Technology Tuition and Fees: <http://www.Florida Tech.edu/registrar/registration/tuitionchrgs.php>

**H. ACADEMIC CONTENT**

**Admission Requirements**

The BAS in Applied Health Sciences is an open access program. Admission criteria require that students will have an AS from a regionally accredited institution with a 2.0 GPA. Students with and earned AA degree from a regionally accredited institution will be reviewed for admission on a case by case basis. The Associate in Applied Science degree does not meet the admission criteria for the proposed baccalaureate degree program. Each student will work with the designated BAS advisor to build an individualized program of study based on the degree and the concentration selected. AS graduates will have a maximum of 21 general education credit hours to complete during the final two years of the baccalaureate program. AA graduates will have completed the general education requirements, but will work closely with an advisor to complete 21 technical credit hours during the third and fourth years. Students will work with the BAS advisor to select appropriate technical electives.

1. General Admission Requirements:

- Admission to EFSC.
- Submission of a completed application to the baccalaureate program indicating a specialization including a one-time application fee.
- Completion of an AS degree with at least a 2.0 grade point average on a 4.0 scale from a regionally accredited institution prior to upper division acceptance. AA degree holders will be reviewed for admission on a case by case basis and may be required to take additional introductory healthcare courses.

- All general education credits fulfilling Gordon Rule requirements must be completed with a grade of “C” or higher.
- Submission of official transcript(s) indicating the coursework taken and the degree(s) awarded.
- Submission of official, final high school transcript or GED with date of graduation.

## 2. Requirements:

- AS degree in a health-related program similar to the following AS degrees offered by EFSC: Dental Assisting Technology and Management, Dental Hygiene, Emergency Medical Services, Medical Laboratory Technology, Nursing RN, Radiography, Health Information Technology and Veterinary Technology. By 2015 EFSC will be adding the following AS health related degrees that would also articulate to the BAS programs: AS Respiratory Care, AS Physical Therapy Assistant, and AS Occupational Therapy Assistant.

The 60 credits of post associate-degree courses include 21 credits in general education or technical electives and 39 credit hours of upper-level coursework. Upper level course work is comprised of 6 credit hours of common core courses and 33 credit hours in the healthcare specialization. Graduates must also satisfy a foreign language requirement through coursework at either the secondary or postsecondary level.

### **Faculty credentials**

EFSC currently employs full and part-time faculty members in nursing, health sciences, science and related associate degree programs that are credentialed to teach baccalaureate courses for the Applied Health Sciences program. Upon program approval, EFSC will hire a new full-time faculty member with a doctorate in an appropriate applied health sciences related field. The primary purpose of the full-time faculty will be to teach upper-division courses and to provide overall program leadership. The college will comply with SACS Comprehensive Standard 3.7.1 and 3.5.4 guidelines for faculty teaching baccalaureate courses and the percentage of discipline course hours taught by faculty members holding the terminal degree. As the program grows, additional faculty members will be hired to comply with this standard of academic excellence. By 2016, the College projects a need for another full time faculty to support the program growth. In addition, the college plans to hire an academic advisor and a part-time administrative assistant to support upper-level students.

### **Anticipated average student/teacher ratio**

In the first year based on enrollment projections as stated in the *Enrollment, Performance and Budget Plan* form the average teacher/student ratio will be 1:30.

### **SACS Accreditation Plan**

EFSC submitted the SACS application prospectus for substantive change from a Level I institution to a Level II institution on September 15, 2012 for consideration at the SACS Board of Trustees’ meeting in December. After receiving approval from the State Board of Education and the SACS Board of Trustees, the College offered its first upper level courses in August 2013. SACS conducted an onsite review of the current BAS program on October 24, 2013 and had no recommendations for change. Formal documentation of this affirmative review is pending.

The college will submit the Letter of Intent to SACs regarding the addition of BAS programs by February 2014, and the SACs application prospectus for substantive change no later than May 15, 2014.

### **Other Specialized Accreditation Plans**

There are no plans at this time to pursue any specialized accreditations for this degree.

### **Common Prerequisites Manual**

There are similar programs listed in the *Common Prerequisites Counseling Manual (CPCM)* for the CIP code 51.2211 proposed by this application a copy of the Florida Virtual Campus - Common Prerequisites Manual for 2012 – 2013 can be found in Appendix H.

### **No prerequisites**

The CPCM does not list required prerequisites for the CIP 51.2211 for the BAS in Applied Health Sciences.

### **Courses by Term for the Final Two Years of the BAS Program**

The BAS in Applied Health Sciences consists of 120 credit hours, comprised of 36 credit hours of general education courses, 45 credit hours of lower level specialized courses, and 39 credit hours of upper level courses. The 39 credits of upper level courses will include a common core of 9 credit hours plus an additional 30 credits in the specialization chosen. This information is displayed in Table 15:

**Table 15**  
**Credit Hour Breakdown for BAS Degree in Applied Health Sciences**

<b>Course Type</b>	<b>Number of Credit Hours</b>
General Education Courses	36
Lower Level Specialized Courses	45
Upper Level Common Core Courses	6
Upper Level Specialized Courses based on Concentration	33
<b>Total Credits</b>	<b>120</b>

The BAS in Applied Health Sciences is designed for maximum flexibility for associate degree holders. Students entering with an AS degrees in health-related programs, 60 credits would articulate from the associate's degree with most students having already completed 15 credit hours of general education courses and 45 credit hours of lower level specialized courses. Once accepted into the BAS program these students would complete an additional 21 credit hours of general education courses and 39 credit hours of upper level courses.

Students with an AA degree may articulate into this program; however, their transcripts will be reviewed on a case by case basis. These students may be required to take additional introductory healthcare courses. The student would transfer 60 credits from the AA degree including 36 hours of general education courses. Once accepted into the program these students would complete an additional 21 credit hours of lower level specialized courses from an approved list of courses and 39 credit hours of upper level courses.

In addition to the above course requirements, all BAS students will be required to meet the State of Florida foreign language requirement. Students who did not complete the foreign language requirement in high school or before acceptance into the program will need to complete an additional eight credit hours of sequential foreign language before graduation. Table 16 lists the upper level courses by common core and by specialization.

**Table 16**  
**Upper Level Courses**  
**Bachelor of Applied Science in Applied Health Sciences**  
**Upper Level Courses**

	Common Upper Level Core Courses	6 credits
HSA 4850	Internship/Capstone Project	3 credits
ENC 3210	Technical Writing	3 credits
	<b>Advanced Allied Health Core Requirement</b>	27credits
HSA 3111	US Healthcare Systems	3 credits
HSA 3180	Management for Health Professionals	3 credits
HSA 3191	Healthcare Automation & Technology	3 credits
HSA 4170	Healthcare Finance	3 credits
HSA 4340	Human Resources Management in Health Services Organizations	3 credits
HSA 4383	Quality Improvement in Healthcare	3 credits
HSA 3222	Management of Long-term Care Facilities	3 credits
HSC 3201	Community Health	3 credits
HSC 3243	Health Education & Promotion	3 credits
	<b>Advanced Allied Health Electives</b>	6 credits
HSA 3502	Healthcare Risk Management	3 credits
HSA 3702	Healthcare Research	3 credits
HSA 4652	Ethics in Healthcare	3 credits
GEY 2000	Introduction to Gerontology	3 credits
GEY 3625	Sociological Aspects of Aging	3 credits
HSC 4500	Epidemiology	3 credits
HSC 3661	Therapeutic Communication: Skills with Patients, Families and the Healthcare Team	2 credits
HSC 4184	Healthcare Leadership	3 credits
HSC 4404	Medical Disaster Management	3 credits
HSC 3801	Clinical Observation/Volunteer Work	1 credit
	<b>Biomedical Sciences Core Requirements</b>	24 credits
MCBC 3020	Biology of Microorganisms & Lab	4 credits
BCH 4024	Introduction to Biochemistry & Molecular Biology	4 credits
PCB 3063	Genetics	3 credits
HSC 3801	Clinical Observation/Volunteer Work	1 credit
	Choose Option A or Option B	12 credits
	OPTION A	
	CHMC 3120 Analytical Chemistry w/ lab	4 credits
	CHMC 4410 Physical Chemistry w/ lab	4 credits
	BSCC 4422 Methods & Applications in Biotechnology	4 credits
	OPTION B	
	PHC 4021 Emerging & Infectious Diseases	3 credits
	PCB 4233 Immunology	3 credits
	HSC 3702 Healthcare Research	3 credits
	HSC 4500 Epidemiology	3 credits

	<b>Biomedical Electives</b>	<b>9 credits</b>
HSA 3502	Ethics in Healthcare	3 credits
HSC 3537	Health & Medical Terminology	3 credits
HSC 4184	Healthcare Leadership	3 credits
HSC 4404	Medical Disaster Management	3 credits
BSC 3424	Nanotechnology	3 credits
BSC 4434	Bioinformatics	3 credits
BSC 4870	Principles of Pharmacology	3 credits
PCB 3134	Cell Biology	3 credits
PCB 4234	Biology of Cancer	3 credits
BSC 3910	Individual Mentored Research in Biology/Biotechnology	1-3 credits
CHMC 4139	Bio-analytical Instrumentation w/Lab	4 credits
ANSC 3006	Introduction to Animal Science	4 credits
ANS 3440	Principles of Animal Nutrition	4 credits
ANS 4905	Individual Mentored Research Animal Science	1-4 credits
ZOO 4232	Comparative Parasitology	3 credits
ZOOC 4603	Embryology/Development	5 credits
ZOO 4905	Individual Mentored Research in Zoology	1-4 credits

### **Relevant Associate in Science Programs at EFSC**

The BAS degree is designed for maximum flexibility to move health care trained individuals into mid-management level employment with Brevard's many health employers. The compatible AS degrees aligned for the Applied Health Sciences include: Dental Assisting Technology and Management, Dental Hygiene, Emergency Medical Services, Medical Laboratory Technology, Nursing RN, Radiography, Health Information Technology and Veterinary Technology.

### **Limited Access**

The proposed BAS program is not a limited access program.

### **I. ENROLLMENT, PERFORMANCE AND BUDGET PLAN**

The first year enrollment is estimated to be 125 students with a projected 25% enrollment growth each year for the first four years. Estimated fourth year student enrollment is 244 students generating approximately 5,856 credit hours based on full-time student load of 12 credits per term.

The total budget for 2014-15 for the BAS degree, including personnel, is \$986,212. The anticipated tuition generated is \$275,370 plus an allocation of \$466,300 from the current College Program Fund appropriation. The College has committed \$244,542 from unrestricted fund balance to cover the first year expenses. In the event state funds are not available, the college has adequate revenues in its fund balance to ensure full funding of the program.

**Table 18**

**FLORIDA COLLEGE SYSTEM  
ENROLLMENT, PERFORMANCE AND BUDGET PLAN**

COLLEGE NAME: Brevard Community College  
DEGREE NAME: Bachelor of Applied Science - Biomedical Science

CONTACT NAME: Cindy Anderson, Controller  
PHONE NUMBER: 321.433.7046

	PROJECTED 2013-14	PROJECTED 2014-15	PROJECTED 2015-16	PROJECTED 2016-17	PROJECTED 2017-2018
<b>I. PLANNED STUDENT ENROLLMENT</b>					
A. Student Headcount	0	125	156	195	244
B. Upper Division Student Credit Hours Generated (Resident)	0	3,000	3,744	4,680	5,856
Upper Division Student Credit Hours Generated (Nonresident)	0	0	0	0	0
Upper Division Total Student Credit Hours Generated (Resident and Nonresident)	0	3,000	3,744	4,680	5,856
C. Upper Division Student FTE (30 Credit Hours) - (Resident)	0.0	100.0	124.8	156.0	195.2
Upper Division Student FTE (30 Credit Hours) - (Nonresident)	0.0	0.0	0.0	0.0	0.0
Upper Division Student FTE (30 Credit Hours) - (Resident and Nonresident)	0.0	100.0	124.8	156.0	195.2
<b>II. PLANNED PERFORMANCE</b>					
A. Number of Degrees Awarded used	0	0	26	26	52
B. Number of Placements	0	0	20	20	42
C. Projected Annual Starting Salary	\$0	\$0	\$40,000	\$40,000	\$40,000
<b>III. PROJECTED PROGRAM EXPENDITURES</b>					
<b>INSTRUCTIONAL</b>					
1. Faculty Full-Time FTE	0.25	3.1	3.7	5.0	6.0
2. Faculty Part-Time FTE	0.00	2.1	2.8	3.0	4.0
1. Faculty Full-Time Salaries/Benefits	10,250	117,975	129,975	211,950	231,950
2. Faculty Part-Time Salaries/Benefits	0.00	42,000	54,800	60,000	79,200
3. Faculty Support: Lab Assistants, etc	0.00	16,500	16,995	17,009	17,519
<b>OPERATING EXPENSES</b>					
1. Academic Administration	2,858	56,433	67,593	81,633	99,273
2. Materials/Supplies	500	15,000	15,000	15,000	15,000
3. Travel	0	3,000	3,000	3,000	3,000
4. Communication/Technology	0	0	0	0	0
5. Library Support	0	82,500	75,200	75,200	75,200
6. Student Services Support	12,901	108,003	123,362	199,671	225,131
7. Professional Services	0	0	0	0	0
8. Accreditation	0	29,000	0	0	0
9. Support Services	0	192,301	233,853	310,153	378,693
	0				
<b>CAPITAL OUTLAY</b>					
1. Library Resources	0	7,000	0	0	0
2. Information Technology Equipment	0	16,500	12,000	0	0
3. Other Equipment	0	300,000	300,000	25,000	25,000
4. Facilities/Renovation	0	0	0	0	0
<b>TOTAL PROJECTED PROGRAM EXPENDITURES</b>	<b>\$26,509</b>	<b>\$986,212</b>	<b>\$1,031,778</b>	<b>\$998,616</b>	<b>\$1,149,966</b>
<b>IV. NATURE OF EXPENDITURES</b>					
1. Recurring	26509	633,712	719,778	973,616	1,124,966
2. Nonrecurring	0	352,500	312,000	25,000	25,000
<b>TOTAL</b>	<b>\$26,509</b>	<b>\$986,212</b>	<b>\$1,031,778</b>	<b>\$998,616</b>	<b>\$1,149,966</b>
<b>V. SOURCES OF FUNDS</b>					
<b>A. REVENUE</b>					
1. Special State Nonrecurring	0	0	0	0	0
2. Upper Level - Resident Student Tuition Only	0	275,370	343,662	429,577	537,522
Upper Level - Nonresident Student Fees Only	0	0	0	0	0
Upper Level - Other Student Fees	0	0	0	0	0
3. Contributions or Matching Grants	0	0	0	0	0
4. Other Grants or Revenues	0	0	0	0	0
5. College Program Funds	0	466,300	581,942	658,158	612,444
6. Unrestricted Fund Balance	26,509	244,542	106,174	0	0
7. Interest Earnings	0	0	0	0	0
8. Auxiliary Services	0	0	0	0	0
9. Federal Funds - Other	0	0	0	0	0
<b>B. CARRY FORWARD</b>	0	0	0	0	0
<b>TOTAL FUNDS AVAILABLE</b>	<b>26,509</b>	<b>\$986,212</b>	<b>\$1,031,778</b>	<b>\$998,616</b>	<b>\$1,149,966</b>
<b>TOTAL UNEXPENDED FUNDS (CARRY FORWARD)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## Budget Narrative

EFSC's budget expenses in the 2013-14 reflect the April to June expenses for hiring the faculty/department chair (\$10,250 and \$2,858) and advisor (\$12,901) to start the program. EFSC estimates costs of \$986,212 for the August 2014 start of the BAS in Applied Health Sciences. Salaries and benefits comprise \$176,476 with \$159,975 devoted to direct instruction; \$56,433 for academic administration and support services; and \$82,500 for library support.

Nonrecurring startup costs include library resources (\$3,000), the full-time instructor/Program Manager's computer system (\$2,000), accreditation expenses including consultant services (\$29,000), information technology equipment (\$4,500) and community promotions (\$10,000).

Current facilities can accommodate the new program without construction or renovation. EFSC is not charging professional services to the program.

### **Instructional**

Faculty. Full Time and Part Time. The total amount \$176,475 budgeted for direct instruction for 2014-15 represents an instructional load of 3.1 FTE (the full-time faculty member/Program Manager and 2.1 FTE in full-time faculty overloads) and 2.1 FTE for additional part-time faculty. The full-time faculty member/Program Manager will have a terminal degree. This faculty member in consultation with other college business faculty develops curriculum, makes textbook decisions, and participates in library acquisitions. To accommodate projected growth of 195 students in 2016-17, a second terminal degreed, full-time faculty will be hired.

### **Operating Expenses**

Academic Administration \$56,433 (2014-15). The full-time faculty member receives an annual stipend and fringe of \$11,433 to manage the program and serve as the Department Chair. Additional support costs of \$45,619 were calculated using the Academic Support costs per FTE from the 2010-11 Cost Analysis report.

Operating Expenses: Recurring expenses of \$500/year are budgeted for years 2015-18, while \$15,000 is budgeted for 2014-15.

Travel. Recurring expenses of \$3,000/year are budgeted for in and out of district mileage and all expenses related to professional development such as conferences.

Library Support. Recurring expenses are budgeted for additional library personnel time (\$7,362/year) and \$82,500 for library support in 2014-15.

Student Services Support \$108,003 (2014-15). As the student projections increase, a second full-time advisor will be hired in 2016-17 based on projected enrollments of 195.

Support Services \$58,000 (2014-15). Recurring expenses support a 20-hour/week administrative support specialist and part-time laboratory assistant. First year wage is \$9/hour with a 3% increase budgeted each subsequent year. First year wage and benefits total \$58,000. By the 2016-17 academic years this position will convert to full time to support the additional faculty and advisor added to serve the projected 195 students. Nonrecurring expenses include: promoting new program awareness, Institutional Support and Physical Plant costs.

## **Capital Outlay**

Library Resources/Other Equipment. First year nonrecurring library expenses of \$7,000 add an estimated 1,244 books, and 192 DVD's to the current collection. This \$7,000 capital outlay is in addition to the operating expenses, \$82,500, for the library. Information technology equipment for \$16,500 will be purchased in the first year supplementing EFSC's multimedia classrooms to accommodate additional students along with \$300,000 in other equipment to support the science labs

## **Sources of Funds**

The first year enrollment is estimated to be 125 students with a projected 25% enrollment growth each year for the first four years. Estimated fourth year student enrollment is 244 students generating approximately 5,856 credit hours based on full-time student load of 12 credits per term.

The total budget for 2014-15 for the BAS degree, including personnel, is \$986,212. The anticipated tuition generated is \$275,370 plus an allocation of \$466,300 from the current Florida College System Program Fund appropriation. The College has committed \$244,542 from unrestricted fund balance to cover the first year expenses. In the event state funds are not available, the college has adequate revenues in its fund balance to ensure full funding of the program.

## **J. PLAN OF ACTION IF PROGRAM MUST BE TERMINATED**

In the event the program enrollment, completion, and placement data indicate that the program is not viable and is to be terminated, a timeline for notification and closure consistent with college policy will be implemented. Students will be given appropriate notice and guidance to complete the program, faculty will be reassigned, and SACS will be duly notified of the strategic teach-out plan for program closure.

If a program is recommended and approved for closure by the faculty and the Academic Affairs Council (AAC), the college is committed to providing an opportunity for students currently in the program to complete, or to provide students with the proper guidance to change majors where appropriate. Students making adequate progress in the program who have maintained continuous enrollment and have the approved program as their declared major will be invited to an advisement session to create a plan for completion within the designated time frame. Continuous enrollment is defined as enrollment in at least one credit course in both the fall and spring terms each academic year. Based on the Governing Catalog rule, students making adequate progress will have a maximum of five years to complete the program.

Faculty and staff will be informed of the program closure through email notification including student guidance guidelines and contact information to facilitate a smooth program close out.

Students in the declared major to be closed will be sent a letter and email notification of the impending program closure and outline specific advisement support available. Based on the data analysis, the response from the letters, and the advisement sessions, the college will develop a schedule of the classes or suitable substitutions that will enable students to complete the program in a timely manner.

## **K. SUPPLEMENTAL MATERIALS**

Supplemental materials include labor market reports, student and employer survey results, committee membership, and excerpts of meeting minutes from Board of Trustee, Provost Council and UCF meetings. Complete meeting notes are available upon request but due to space limitations excerpts were compiled. Eastern Florida State College has received many letters of support for the proposed baccalaureate degree program in Applied Health Sciences from a variety of constituents. All letters of support are included in Appendix O; Table 19 provides a list of all letters received.

**Table 19**  
**Letters of Support**

<b>Agency</b>	<b>Representative</b>	<b>Position/Title</b>
Brevard County Sheriff's Office	Wayne Ivey	Sheriff
Brevard Public Schools Career and Technical Education	Janice Scholz	Director
Brevard Workforce	Lisa Rice	President/CEO
City of Melbourne	Kathleen Meehan	Mayor
City of Palm Bay	William Capote	Mayor
Daytona State College	Carol W. Eaton	President
Florida Institute of Technology	T. Dwayne McKay	President/CEO
Parrish Medical Center	George Mikitarian	CEO

## APPENDIX A

### Excerpts from District Board of Trustees Meeting Minutes

The following are excerpts from Excerpts from the District Board of Trustees Meeting Minutes.

District Board of Trustees Members: Stephen G. Charpenter; Myra I. Haley; Dewey L. Harris; Moses L. Harvin; Alan H. Landman; Dixie N. Sansom; Dedra S. Sibley  
(Past and Present Members)

#### **January 24, 2011**

Mr. Charpentier made a motion requesting that the administration look into the local demand and supply for Baccalaureate degrees in various disciplines that would be applicable given the economic and vocational need of Brevard County, gather the data necessary to allow for a comprehensive review of the subject by the Board of Trustees that this be done in concert with UCF and Florida Tech and with input from Eastern Florida State College faculty and students as deemed most accurate by the administration.

Action: motion carried by unanimous vote. Those voting in favor: Charpentier; Sansom; Harris; Landman; and Sibley.

#### **March 21, 2011**

Dr. Drake reported the College is finalizing appointments to an ad hoc committee to include one representative from the Florida Institute of Technology and one from the University of Central Florida. The College is also assessing the need as perceived by current BCC students.

Action: No action required.

#### **June 20, 2011**

Dr. Furlong delivered a presentation concerning the Four-Year Degree Program Needs Assessment. Mr. Harris moved to continue to retain Dr. Furlong to assist the College with the needs assessment.

Action: motion carried by unanimous vote. Those voting in favor: Sansom; Harris; Landman; and Sibley.

#### **August 15, 2011**

Dr. Drake stated he is meeting with Dr. Furlong in the very near future. He also stated that Dr. Furlong was retained, in part, to ensure that as a two year institution BCC is meeting the needs of its students, their current or prospective employer and the economic development of the region. Dr. Drake went on to say he wants to be sure we are giving maximum attention to the strong partnership we have with the University of Central Florida and the Florida Institute of Technology.

#### **October 17, 2011**

Dr. Miedema delivered a presentation concerning the prospect of four - year degree programs. Mr. Charpentier indicated that a motion was in order to ask Dr. Miedema, along with the administration, to provide a timeline to the trustees regarding this issue.

Action: Motion carried by unanimous vote. Those voting in favor: Charpentier; Harris; Landman; and Haley.

#### **December 12, 2011**

1. Dr. Richey asked Dr. Miedema to provide a timeline from the previous meeting and where the College administration is regarding that timeline. Dr. Miedema stated that after reviewing the most recent targeted occupational list for Brevard County, it was her recommendation that the College should approach any new programs from the basis of workforce placements. Dr. Miedema also reiterated that the College administration is reviewing data and preparing to make recommendations for two-year programs, certificates, and also four-year programs, with the intention of discussing the latter with the University of

Central Florida in the context of the Two Plus Two model, as well as with Florida Tech and potentially other providers.

2. To date, the data reviewed suggests unmet local needs for three four-year programs: business, health-care administration, and nursing. The two-year programs for which there are unmet local needs and/or emerging employment opportunities are: aviation maintenance and management; cyber security; food-service management; and physical therapy assistants. The college-credit certificates are: diagnostic medical stenographers; police, fire and ambulance dispatchers; health-care technologists and technicians; manufacturing and machining technicians; audio and visual equipment technicians; and electricians.

3. In response to a question from Mr. Landman, Dr. Miedema that that the data gathering timeline for the surveys would span approximately one month

### **March 19, 2012**

Dr. Richey stated that on March 21, 2011, the Board of Trustees requested that research be conducted concerning this topic. The objective of the research was to determine what, if any, four year programs would directly benefit the local community by providing educational programs that could lead to local employment.

The first step in the process occurred last spring consisting of a student survey asking five questions, the results of which were tallied from 1,986 responses. The questions and responses were: Are you in favor of four year programs? (92% responded affirmatively.) Would you continue your education at Eastern Florida State College if four-year degrees were available? (85% responded affirmatively.) What method of instruction would you prefer? (73% were in favor of both on-campus and online delivery methods, similar to what the College is doing now.) How many of the campuses should offer baccalaureate degrees? (66% favored offering the programs at all four campuses.) And, what area should you study at the baccalaureate level? (55% replied in favor of health-related and business programs.)

From there, Dr. Richey continued, the Board of Trustees instructed the administration to look more closely at the possibility of offering bachelor's degrees. Further research that the College conducted regarding targeted occupations for Brevard County indicated that more than 6,100 new management-related jobs are created annually, and that there is an ongoing unmet need for nurses and other health-care workers. The average salary for these jobs is approximately \$58,000 annually. The College's research also yielded that approximately 1,700 jobs with annual salaries ranging from \$30,000 to over \$60,000 are created every year in this demographic area.

Next, the educational preparation for each of those employment opportunities was explored. Based on this research, Dr. Richey stated, three potential bachelor degree programs were presented by the administration to the Board of Trustees. The Board directed further research be conducted for the following programs: Bachelor of Applied Science and Healthcare Management; Bachelor of Applied Science and Supervision Management; and Bachelor of Science in Nursing. The survey results showed that employers are anticipating numerous jobs but do not have qualified employees with the educational background for these jobs at this point in time.

The next step was to determine the best way to meet the demand. In exploring the options, the College reached out to the administration of the University of Central Florida to discuss collaborative efforts toward baccalaureate programs. This approach, Dr. Richey added, is consistent with the spirit of the consortium agreement which the College entered into with UCF several years ago. In response to all of the above, Dr. Richey commented, the following plan is now being recommended to the Board of Trustees:

1. Eastern Florida State College should consider developing an agreement between Brevard Community College and University of Central Florida to allow students who would enroll in the Associate degree Nursing Program at BCC to concurrently enroll in a bachelor's degree in nursing at UCF.

2. Eastern Florida State College should develop a Bachelor of Applied Science (BAS) and Applied Health Sciences with a general-management concentration and a health-care concentration.

The research does not show any local educational partner is offering, nor has plans to offer, a BAS in Applied Health Sciences to the Associate of Science and Associate of Arts students. Both of the initial offerings would share common core courses and take different substantive tracks primarily in the fourth year of study. In the future, the scope of this degree program can be narrowed and tailored to meet the ongoing needs of local employers.

As a result of the findings, Dr. Richey commented, the Board of Trustees should be aware that the College has begun strategic planning in a number of related areas. First in the area of curriculum, the framework for the BAS in Organizational Management has been established by the Florida Department of Education and requires 120 credit hours (60 at the associate-degree level, and 60 at the BAS level), none of which will necessitate new classrooms or new laboratories. Dr. Richey supplied to each trustee an outline of the proposed curriculum, and added that students will be surveyed to determine the appropriate time and location of coursework prior to the start of this program.

All BAS graduates will have an internship and will be established in the area of interest to provide the student with real like work experience. Templates for such agreements with local employers have already been established, according to Dr. Richey.

In terms of faculty, it is anticipated that only one additional full-time faculty member will be required and two to three adjunct (part-time) faculty members will be needed initially. In addition, one of the existing full time faculty members will be appointed as the founding department chairperson for the BAS program.

From a management perspective, the new program will have sufficient administrative support and will report to the Department Chair, then to the Chief Learning Officer, and then to the President. In addition, a Community Advisory Committee will be created to review the curriculum and the overall effectiveness of the BAS program.

From the admissions perspective, students will be admitted to the BAS program upon successful completion of an AA or AS degree with a 2.5 GPA along with other requirements.

Future planning will be conducted several areas, one being curriculum development and student learning outcomes. The College is estimating the first classes to have approximately 125 students and will increase the course offerings as the community needs increase. Based on the data from other colleges who have initiated similar programs, the College anticipates a growth of several hundred (and potentially thousands) during the next three to five years.

According to the budget, estimated expenditures should be approximately \$175,000 in terms of those initial students on an incremental basis, but the additional revenue will offset the expenses and hence should not have a negative impact from a financial perspective. The tuition-and-fees charges are set statutorily, Dr. Richey pointed out, and the initial tuition will be more than the current two-year tuition charge, but less than four-year public university tuition.

If this four-year program is approved today by the Board of Trustees, Dr. Richey said, the College will begin completion of the necessary processes with the Florida Department of Education and the Southern Association of College and Schools. The College will be looking at offering the programs in August 2013.

Also, the College will look at changing its name after the process but will need the Board of Trustees approval and legislative approval. Dr. Richey recommended conducting a student and community survey in the selection of that name. Most importantly, the community and the students should clearly understand that if the College moves forward on the bachelor degree programs, the College will adhere to its mission and continue to provide

AA, AS certificate and all other programs it is offering at this time. The bachelor's program will be another option for the students and not a fundamental shift in the workforce-based mission of Eastern Florida State College.

Dr. Richey asked consultant Dr. Tom Furlong, as well as EFSC Vice President Linda Miedema, to come to the lectern to answer any questions the Board of Trustees may have. Mr. Landman opened the floor to the Board of Trustees for questions. Mr. Charpentier asked simply, "Why would the College not go forward with these four-year programs?" Dr. Miedema commented that the Florida Statutes clearly state that the purpose and the reasons for two-year community colleges to become four-year state colleges was to meet local workforce needs. The College will not lose its focus because the College is tailoring this specifically for the needs of the local community.

Mr. Landman asked if there any other questions. Hearing none, Mr. Landman asked if one of the members of Board of Trustees would make a formal motion for the purposes of the Bachelor of Applied Science and Applied Health Sciences concentration and a similar motion related to the Healthcare Applied Health Sciences concentration. Ms. Haley responded by making the motion as stated; Mr. Harris seconded the motion.

Action: Motion carried by unanimous vote. Those voting in favor: Haley, Harvin, Charpentier, Harris, and Landman.

Mr. Landman stated the second motion on the floor is a motion authorizing the College administration to take the necessary steps to enter into an appropriate agreement or agreements with University of Central Florida to establish a concurrent Bachelor of Science in the nursing option for Eastern Florida State College students. Mr. Harvin made the motion; Ms. Haley seconded the motion. Mr. Harris asked with regard to the concurrent enrollment agreement, would the degree be issued by the University of Central Florida or Eastern Florida State College. Dr. Richey replied that the student would earn two degrees, one from the College and one from the University of Central Florida. Mr. Harris asked if the AA comes from Eastern Florida State College; Dr. Richey responded affirmatively.

Mr. Landman asked if there were any other questions. Hearing none, the question was called.

Action: Motion carried by unanimous vote. Those voting in favor: Haley, Harvin, Charpentier, Harris, and Landman.

Mr. Landman asked for a motion from the trustees to authorize the administration to do whatever they deem necessary whether its community student surveys or anything else in regards to the name change as it relates to what the Board of Trustees and the College are doing today.

Mr. Harvin asked why the College would need to change its name. Dr. Furlong explained that initially when St. Petersburg College (then known as St. Petersburg Junior College) launched its pilot four-year program, the Southern Association of Colleges and Schools issued a ruling that St. Petersburg would have to change its name because the College was proceeding from "level one" to "level two" accreditation. Eventually, however, SACS decided that a college did not need to change its name, but that its name must reflect the institution's mission.

Mr. Landman asked if there were any other questions. Hearing none, Mr. Landman asked if one of the Board of Trustees would make a formal motion. Mr. Harvin made the motion; Ms. Haley seconded.

Action: Motion carried by unanimous vote. Those voting in favor: Haley, Harvin, Charpentier, Harris, and Landman.

March 18, 2013

Dr. Richey stated that the College, with the assistance of Brevard Workforce Development, recently

completed the 2013 survey of the business and industrial communities regarding the postsecondary educational opportunities that these companies would like for Brevard Community College to consider offering so that the companies can address their employment needs. While reviewing the results, the College found several important factors:

- I. The College had greater participation in the number of businesses and industries compared to last year's survey; and,
2. The College had a statistically significant cross-section of the types of industries participating in the survey; and,
3. The College had a significant cross-section of the sizes of the businesses, which ranged from very small employers to companies with a workforce exceeding 250 employees.

Ms. Haley asked who participated in the survey, and Dr. Miedema responded that Brevard Workforce Development addressed the survey to all of its member organizations, including the Harris Corporation.

Dr. Richey added that this survey represents approximately 15,000 employees who are employed by these organizations; this represents a sample of approximately 6 percent of the workforce in Brevard County. This is slightly larger than last year's sample.

The College researched the Florida Targeted Occupational list for Brevard County for 2012 and 2013, and also searched the College's own data in order to narrow the types of questions which employers would be asked in regard to numerous employment fields, as follows:

- I. Organizational Management with a concentration in Public Safety Management.
2. Organizational Management with a concentration in Sales and Marketing Management.
3. Applied Health Sciences with an Applied Health Sciences concentration.
4. Applied Health Sciences with a Biomedical concentration.
5. Applied Information Systems with a concentration in Software Services.
6. Applied Information Systems with a concentration in Networking Services.
7. Applied Information Systems with a concentration in Program Development.

One of the questions asked of the participants was, "Does your company have jobs that require a minimum of a Bachelor's Degree in anyone of these related fields?" In this facet of the data-gathering process, each of the above fields was set apart separately. The results are as follows:

- I. 31 percent - Yes for jobs with a minimum of a Bachelor's degree in Public Safety Management.
2. 40 percent - Yes for jobs with a minimum of a Bachelor's degree in Sales and Marketing Management.
3. 52 percent - Yes for jobs with a minimum of a Bachelor's degree in the combined fields of Applied Health Sciences.
4. 84 percent - Yes for jobs with a minimum of a Bachelor's degree in the combined fields of Applied Information Systems.

The participants were also asked, "What is the number of anticipated annual job openings in these fields?" A significant majority of the respondents (65 percent) stated they do not have a pool of qualified candidates to actually fill these jobs.

Data gathered during the survey process showed that the average annual salary in Public Safety and Applied Health Science is approximately \$50,000; Sales and Marketing is slightly higher, \$51,625; and Information Systems jobs average \$56,333 annually. The data also showed that there will be job growth in all these fields.

The College has in place Associate degrees and other certification programs that align perfectly with these Bachelor's degrees. This alignment will give additional training and educational opportunities to the College's current students, as well as those working adults who wish to advance their careers.

Dr. Richey stated with the approval of the Board of Trustees today, the College will be in position to offer the over needed advanced training in the three fastest-growing segments in the region, state and the nation as follows:

- I. Bachelor of Applied Sciences (B.A.S.) in Organizational Management with four concentrations; or tracks, consisting of General Business, Healthcare Management, Public Safety Management, and Sales and Marketing Management.
2. B.A.S. in Applied Health Sciences, which would comprise Allied Health Sciences and Biomedical Sciences tracks.
3. B.A.S. in Applied Information Systems with Software Services, Networking Services, and Program Development tracks.

All of the proposed degrees are workforce-related, applied-science degrees. The College has reached out to the University of Central Florida and the Florida Institute of Technology in order to inform them and to move these initiatives forward. Dr. Richey stated although the College will need to add a limited number of adjunct (part-time) faculty, as well as a limited number of full-time faculty with doctoral credentials, the necessary personnel are in place to teach and support these programs.

The Applied Health Sciences Degree tracks and the Applied Information System tracks will be developed to meet the Governor's \$10,000 challenge. As part of that challenge, the College has secured private scholarship funds that will be used to make the challenge a reality for students. The criteria to be eligible will be developed along the lines of the other Florida College System Institutions. and will be finalized once these degrees are fully developed and have been approved by the State Board of Education and the Southern Association of Colleges and Schools (SACS).

These new degrees will be highly attractive to the students for a number of reasons:

- I. There is a substantial employment demand in these fields.
2. The tuition for these programs will continue to be lower than that of any other four-year institution in the region.
3. The degrees will allow students to stay close to their homes and families, reducing the additional cost of housing in another location.
4. The degrees will provide people in the workforce with the chance to learn new skills and increase their earnings in their chosen fields.
5. Students will continue to benefit from small class sizes and personalized instruction that have long been hallmarks of the College.

Dr. Richey concluded his remarks by pointing out that the College will also continue to add Associate degrees and other certification programs, thereby continuing to move the College where the jobs are and the need is. Dr. Richey then asked for the approval of the proposed new baccalaureate programs.

Mr. Landman inquired whether the proposed degrees discussed today will meet the Governor's challenge. Dr. Richey responded that two of the three programs. Applied Health Sciences and the Informational Systems will meet the challenge, but not the Organizational Management.

Mr. Landman then asked how the College plans to inform the students and the public about these new degree programs. Dr. Richey replied the BCC Career Center opened a year and has seen over 16,000 students helping them understand their options and what is needed to achieve their goals.

Mr. Landman asked the other trustees if they had any comments or questions. Mr. Charpentier commented that the addition of the new programs is a sound and workable idea. Ms. Haley stated that the proposal Dr. Richey outlined will enable the College to retain students who may otherwise leave the area to get their Bachelor's degrees, and then remain in that area afterward.

Mr. Harris asked if the College had feeder programs to the new BAS degrees. Dr. Richey responded that every proposed B.A.S. Degree has feeder programs. Mr. Harvin asked how far \$10,000 will take a student if this proposal is approved. Dr. Richey responded that tuition and fees currently average \$3,300 per year, so a four-year degree program would cost the student approximately \$13,000.

Mr. Landman asked if this cost is for tuition only, or does it also include the cost of text books. Dr. Richey responded that the cost is for tuition only.

Mr. Landman asked if there is a program in which the students utilize online textbooks. Dr. Miedema responded in the affirmative. Dr. Richey stated the College has moved aggressively to keep down the cost of textbooks for students, Mr. Landman asked for a formal motion approving the proposed new programs. Ms. Haley so moved; Mr. Harvin seconded the motion.

*Action:* motion carried by unanimous vote. Those voting in favor: Charpentier, Harris, Haley, Harvin and Landman.

## APPENDIX B

### University of Central Florida Meeting Minute Excerpts



### PROPOSED BACHELORS OF APPLIED SCIENCE DEGREE AT EASTERN FLORIDA STATE COLLEGE

**Date:** October 11, 2013  
**Time:** Unknown  
**Attendees:** Jeff Jones (UCF), Dr. Tony Waldrop (UCF), Dr. Linda Miedema (EFSC)

#### Welcome

**Topic:** **Procedural Concerns**

**Discussion:** EFSC sent the notice of the proposed courses in the proposed BAS degrees after discussion with the Board of Trustees and after the submission of a letter of intent to the Florida Department of Education. There had been some verbal discussions with UCF officials about the proposed programs. A formal meeting with the Provost and Vice Provost was initiated 10/11/2013.

**Follow up:** For any future BAS/BS/BA program proposals, EFSC will meet with UCF earlier in the process to allow for discussion on areas of potential concerns. EFSC and UCF will endeavor to meet annually to discuss potential new programs.

**Topic:** **Program Concerns**

**Discussion:** Dr. Waldrop shared an email with concerns about one area of concentration, health care administration. EFSC asked for clarification as it appeared the concern was related to the Health Care Management track within the already approved BAS in Organizational Management. No other programmatic concerns were addressed for the proposed programs.

**Follow up:** EFSC was given the contact information for the UCF department chair that expressed the concern and will follow up directly with him.

**Topic:** **Potential Future Concern**

**Discussion:** One faculty member expressed a concern that EFSC could change some of the courses in the proposed programs after the approval and then the programs could potentially be a repetition of course works at UCF.

**Follow up:** Future concerns will be addressed if/when they occur.

#### **Telephone Conference with Department Chair Dr. Reid Oetjen**

**Topic:** **Program Concern**

**Discussion:** Dr. Oetjen expressed a concern that the current health care management concentration in the existing BAS in Organizational Management was similar to the program at UCF. He was concerned that his department had not seen the course listings before they were approved.

**Follow up:** This concentration has already received SACS and Florida DOE approval and therefore will not be changed at this time. EFSC will monitor students graduating with this degree and the number of them who find employment in their field. If it appears that there is not a local job market or that the program at UCF is meeting all local need in Brevard County, EFSC will re-evaluate the continuation of the program.

**Topic:** **Potential Future Concerns**

**Discussion:** Dr. Oetjen was invited to become a part of the EFSC advisory committee in looking at future health sciences programs.

Via L. Miedema (email)

## APPENDIX C

### Library Resources

#### Count of Existing Resources Supporting the BAS in Applied Health Sciences

Program	Print & Media (Cocoa)		Print & Media (Melbourne)		Electronic				
	Books	DVDs	Books	DVDs	eBooks	Streaming Media	Databases	e-Journal Subscriptions	Full-Text Journals
Biomedical Concentration	767	99	477	94	1,169	3,120	8	9	3,977
Advanced Allied Health Concentration	165	23	102	17	230	300	4	3	2,873

#### New Library Resources Needed for the BAS in Applied Health Sciences

Start Up Resources	Estimated Cost
Print Books	\$4,500
eBooks	\$1,500
Print Media	\$ 500
Streaming Media	\$ 500
e-Journal subscriptions *	\$37,500
Databases	\$38,000
<b>Total Start Up Costs</b>	<b>\$82,500</b>
*recurring cost	

**APPENDIX D**

**Committee Memberships**

<b>Name</b>	<b>Title/Position</b>	<b>Business/Department</b>
<b>Steering Committee</b>		
Babb, Dr. Kathinka	Faculty Liaison Curriculum Development	Eastern Florida State College
Bottesch, James	Full-time Faculty	Eastern Florida State College- Science
Brown, Wayne	Full-time Faculty and Program Manager	Eastern Florida State College-Health Sciences
Burnette, Stephanie	Registrar	Eastern Florida State College
Cobb, Dr. Kathy	Provost	Eastern Florida State College- eBrevard
Cunningham, Kate	Dean, Nursing and Health Sciences Institute	Eastern Florida State College
Earle, Dr. Laura	Full-time Faculty and Program Manager	Eastern Florida State College-Health Sciences
Eichas, Linda	Director, Collegewide Admissions and Advisement	Eastern Florida State College
Dawson, Jacinta	BAS Advisor	Eastern Florida State College
Dietrich, Dr. John	Vice President, Enrollment Management and Student Success	Eastern Florida State College
Engeron, Tara	BAS Advisor	Eastern Florida State College
Gorham, Dr. Jayne	Associate Vice President, Planning & Assessment	Eastern Florida State College
Glisch, John	Associate Vice President , Communications	Eastern Florida State College
Lanza, Sandy	Full-Time Faculty and Program Manager	Eastern Florida State College- Health Sciences
Lopez, Maritza	Career & Technical Programs Specialist	Eastern Florida State College
Mecouch, Paige	Administrative Assistant, Curriculum Development	Eastern Florida State College
Miedema, Dr. Linda	Vice President, Academic Affairs and Chief Learning Officer	Eastern Florida State College
Picchi, Amy	Full-time Faculty and Department Chair	Eastern Florida State College- Science
Paradise, Dr. Richard	Associate Vice President, Facilities	Eastern Florida State College
Sheehan, Susan	Full-time Faculty and Program Manager	Eastern Florida State College- Health Sciences
Stahley, Dr. Mem	Dean, Learning Resources	Collegewide Learning Resources
<b>Curriculum Committee</b>		
Armstrong, John	Full-time Faculty	Eastern Florida State College-Science
Babb, Dr. Kathinka	Faculty Liaison Curriculum Development	Eastern Florida State College
Bacheller, Cherylan	Academic Technologist	Eastern Florida State College
Bobik, Connie	Full-time Faculty and Department Chair	Eastern Florida State College- Institute of Nursing
Bottesch, James	Full-time Faculty	Eastern Florida State College-Science
Brown, Wayne	Full-time Faculty	Eastern Florida State College-Health Sciences

Cuevas, Carlos	Full-time Faculty	Eastern Florida State College-Science
Earle, Dr. Laura	Full-time Faculty and Program Manager	Eastern Florida State College-Health Sciences
Gorham, Dr. Jayne	Associate Vice President, Planning & Assessment	Eastern Florida State College
Guvendik, Dr. Merlut	Full-time Faculty	Eastern Florida State College-Science
Iannotti, Donna	Full-time Faculty	Eastern Florida State College-Science
Lanza, Sandy	Full-time Faculty and Program Manager	Eastern Florida State College- Health Sciences
Liechty, Dr. Melissa	Full-Time Faculty	Eastern Florida State College-Science
Mecouch, Paige	Administrative Assistant, Curriculum Development	Eastern Florida State College
Miedema, Dr. Linda	Vice President, Academic Affairs and Chief Learning Officer	Eastern Florida State College
Miller, Gretchen	Full-Time Faculty and Program Manager	Eastern Florida State College-Health Sciences
Moisii, Dr. Cristina	Full-time Faculty	Eastern Florida State College-Science
Ojwang, Joshua	Full-time Faculty	Eastern Florida State College-Science
Picchi, Amy	Full-time Faculty and Department Chair	Eastern Florida State College-Science
Piva, Susan	Full-time Faculty	Eastern Florida State College-Institute of Nursing
Rezeau, Michelle	Full-time Faculty	Eastern Florida State College-Science
Sheehan, Susan	Full-time Faculty and Program Manager	Eastern Florida State College-Science
Wagner, Dr. Daniel	Full-time Faculty	Eastern Florida State College-Science
Weaver, Craig	Full-time Faculty	Eastern Florida State College-Science
Zuvich, Tatiana	Full-time Faculty	Eastern Florida State College-Science
<b>Student Services Committee</b>		
Babb, Dr. Kathinka	Faculty Liaison Curriculum Development	Eastern Florida State College
Burnette, Stephanie	Registrar	Eastern Florida State College
Cady, Cathy	Director, Student Recruitment and Support Services	Eastern Florida State College
Dietrich, Dr. John	Vice President, Enrollment Management and Student Success	Eastern Florida State College
Dzadovsky, Indira	Director, Financial Aid and Veterans Affairs	Eastern Florida State College
Eichas, Linda	Director, Collegewide Admissions and Advisement	Eastern Florida State College
Mecouch, Paige	Administrative Assistant, Curriculum Development	Eastern Florida State College

**APPENDIX E**  
**Steering Committee Meeting Minutes**



**BACHELORS OF APPLIED SCIENCE DEGREE APPLIED**  
**HEALTH SCIENCES AND BIOMEDICAL SCIENCES**  
**STEERING COMMITTEE MEETING**

**Date:** 10/10/2013  
**Time:** 10:00 am to 12:00 pm  
**Attendees:** Dr. John Dietrich, Stephanie Burnette, Kate Cunningham, Jacinta Dawson, Tara Engeron, Linda Eichas, Dr. Jane Gorham, Dr. Kathinka Babb, Paige Mecouch

Welcome

**Topic:** **Goal for Steering Committee**

**Discussion:** The Steering Committee will review research and data to provide guidance with the creation and implementation of the new Bachelors of Applied Science degrees in Applied Health Sciences and Biomedical Science.  
Kathinka Babb discussed the creation of three subcommittees: Curriculum Development, Student Services, and Business Advisory. The Subcommittees will validate the program of study, program learning outcomes, and student services processes.

**Topic:** **Survey Results and Local Data (Power Point)**

**Discussion:** A review of survey results and local data, from Brevard County and surrounding areas, was presented in a power point presentation by Kathinka Babb. The results of data collection shows that Brevard County and surrounding areas are in need of Bachelor degree graduates in the area of Biomedical Sciences and Applied Health Sciences. The data also showed that employability is very likely for a graduate of the programs.

**Topic:** **BAS in Biomedical Sciences and Applied Health Sciences**

**Discussion:** Kathinka Babb discussed with the Committee the Biomedical Science program and the two tracks available to students: Biological Sciences and Biomedical Technology. Kathinka Babb also discussed how these degrees differ from the degrees offered by other local institutions.  
Graduates of the Biomedical Technology BAS will be able to sit for the MLSASCP certification exam. Kathinka Babb explained what Associate Degree programs will feed into the BAS programs. Additional program that will feed into BAS programs are: AS

Physical Therapy Assistant, AS Occupational Therapy Assistant, AS Respiratory Care. These classes are slated to be available in Fall 2015.

**Topic: Chemical Technology AS Degree**

**Discussion:** Kathinka Babb presented a solution for the problem of AS degree graduates not having the prerequisite courses for the advanced science and mathematics courses contained in the BAS in Biomedical Science program. The solution was to reactivate the Chemical Technology Associate of Science degree and modify some of the core and elective classes contained in the program to meet the prerequisite needs of the BAS in Biomedical Science. There were concerns with additional science course causing problems with students on financial aid. Further investigation will take place.

**Topic: Admission Criteria and Advising**

**Discussion:** Paige Mecouch presented the admission criteria for the BAS Applied Health Sciences and Biomedical Science. Applicants for the BAS programs are required to hold an AS degree from a regionally accredited institution in a Health Science program or have an AA degree. AA graduates will be evaluated on a case-by-case basis for admission into the program. Paige Mecouch stated that as the BAS programs are developed more fully, there will be advising guidelines for Student Services to use.

**Topic: Business Advisory Subcommittee**

**Discussion:** Paige Mecouch discussed the purpose and make-up of the Business Advisory Subcommittee. The subcommittee will be made of local business and industry personnel and will be chosen by the college administration.

**Topic: Finances and Capital Expenditures**

**Discussion:** Paige Mecouch discussed the funding needed for the BAS Applied Health Sciences and Biomedical Science. Staffing for the courses can be achieved, in most respects, with current faculty. Additional faculty and staff may be needed for future growth. Discussions with college administration will take place to meet the financial needs of the programs.

**Meeting Adjourned.**

**APPENDIX F**  
**Curriculum Committee Meeting Minutes**



**BACHELORS OF APPLIED SCIENCE DEGREE APPLIED**  
**HEALTH SCIENCES AND BIOMEDICAL SCIENCES**  
**CURRICULUM DEVELOPMENT SUBCOMMITTEE MEETING**

**Date:** 10/15/2013  
**Time:** 2:00 pm to 4:00 pm  
**Attendees:** Tara Engeron, Dr. Mevlut Guvendik, Carlos Cuevas, Christi DiSturco, Cher Woolley, Cherylan Bacheller, Dr. Laura Earle, Sandi Lanza, Susan Sheehan, Kimberly Greene, Dr. Tatiana Zuvich, James Bottesch, Michelle Rezeau, Wayne Brown, Gretchen Miller, Donna Iannotti, Dr. Kathinka Babb, Paige Mecouch

**Welcome**

**Topic:** **Goal for the Subcommittee**

**Discussion:** Programs of Study and Evolution of Biomedical Sciences BAS  
Draft of courses for program core and specializations in Applied Health Sciences and Biomedical Science including electives and major course work were selected and discussed. Kathinka Babb explained the purpose and scope of the Biomedical Science program with the two tracks specialization: Biological Science and Bio-technology. The goal of the Subcommittee is to integrate sciences specialties for Associate of Science degree graduates to gain admittance into BAS program and to successfully graduate with the BAS degree. A draft of the program of study was given to the Subcommittee for review.  
The Subcommittee made suggestions for additional elective and core courses to create a well-rounded and all inclusive program for students with the emphasis on what is needed in the current scientific workplace.

**Topic:** **Dead Lines for Course Submission**

**Discussion:** Deadline for all course completion and submission to Cluster is December 4, 2013 for Fall 2014 offering. Kathinka Babb read list of courses needing to be created for the first year's program of study.

**Topic:** **Additional courses to be considered for the Biotechnology Track**

**Discussion:** It was suggested by the Subcommittee that a courses in Parasitology, Technical Writing, Analytical Instrumentation, Emerging and Infectious Diseases be added elective and core classes respectively.

**Topic:** **Chemical Technology AS Degree**

**Discussion:** Kathinka Babb presented a solution for the problem of AS degree graduates not having the prerequisite courses for the advanced science and mathematics courses contained

in the BAS in Biomedical Science program. The solution was to reactivate the Chemical Technology Associate of Science degree and modify some of the core and elective classes contained in the program to meet the prerequisite needs of the BAS in Biomedical Science.

**Topic: Equipment needed for Biomedical Science BAS Program**

**Discussion:** The Subcommittee gave a partial and inconclusive listing with approximate cost of equipment. A more thorough list will be submitted by Subcommittee once courses are decided and written. The Subcommittee was tasked to decide what kind of staffing would be necessary for the program, as well. A brief discussion of facilities and the requirements for the programs: proper, to-code ventilation, storage facilities, and hazard disposal facilities was discussed. Kathinka Babb stated that a meeting with College Facilities is required to address the concerns and to come to a resolution of those facilities concerns.

**Topic: Library Resources**

**Discussion:** A discussion on what resources the Library Systems currently has for Scientific journals, periodicals, and media ensued. Library staff requested that the other Subcommittee member's email requested media to them so that they may check on feasibility and availability of media.

**Topic: Applied Health Sciences BAS**

**Discussion:** An explanation of the purpose and scope of the BAS in Applied Health Sciences was given by Kathinka Babb. It was explained how the Advanced Allied Health BAS differs from the Organizational Management BAS as well as the AS degrees that will feed into this program. The Subcommittee was given a draft program of study for review and discussion. Kathinka Babb discussed classes that would need to be created and submitted to the Cluster for approval by December 4, 2013.

**Topic: Candidate Selection and Admission Process**

**Discussion:** A brief discussion on the admission criteria for the BAS Biomedical Science program ensued. It was agreed that due to the intensive science course offerings, it would be important to develop minimum standards of acceptance into the program. The exact number of students allowed into the program, the minimum GPA, previous experience and other factors were discussed. No firm guideline was established and will be discussed further at a later time.

**Topic: Next Subcommittee Meeting**

**Discussion:** TBA

**Meeting Adjourned: 1554**

KB/pm

**APPENDIX G**  
**Student Services Committee Meeting Minutes**



**BACHELORS OF APPLIED SCIENCE DEGREE APPLIED**  
**HEALTH SCIENCES AND BIOMEDICAL SCIENCES**  
**STUDENT SERVICES MEETING**

**Date:** 09/26/2013

**Time:** 10:00 a.m. to 11:00 a.m.

**Attendees:** Jacinta Dawson, Tara Engeron, Dr. Kathinka Babb, Paige Mecouch

**Topic:** **Goal for the Student Services**

**Discussion:** The goal for the Student Services meeting was to inform the Advisors of the BAS Biomedical Science and Applied Health Sciences program offerings, pending approval, which will be offered August 2014.

**Topic:** **Admission Requirements**

**Discussion:** Admission requirements of the BAS programs were discussed. The admission requirements are the same as the other BAS degrees that are offered: AS degree in relevant course of study or AA degree; on case-by-case basis.

**Topic:** **Two Tracks for Biomedical Science Degree**

**Discussion:** Students who are seeking entry into the Biomedical Science degree program will have two tracks to choose from: Biotechnology and Biological Science. Students will take specific course work that will allow them entry into the job market in the Biotechnology field or will allow them to apply for entry into professional schools.

**Topic:** **Applied Health Sciences**

**Discussion:** Students who choose the Applied Health Sciences degree program will be able to enter the work force in a supervisory capacity when completing the program.

**Topic:** **Tools for Advising**

**Discussion:** It was discussed that Advisors could create a chart or “guide” to assist them in helping students choose the correct degree and/or track to meet their long term educational and employment goals.

**Topic:** **Candidate Selection and Admission Process**

**Discussion:** A brief discussion on the admission criteria for the BAS Biomedical Science program ensued. It was agreed that due to the intensive science course offerings, it would be important to develop minimum standards of acceptance into the program. The exact number of students allowed into the program, the minimum GPA, previous experience and other factors were discussed. No firm guideline was established and will be discussed further at a later time.

**Topic: Next Subcommittee Meeting**

**Discussion: TBA**

**Meeting Adjourned: 11:00**

KB/pm

**APPENDIX H**  
**Florida Department of Education Common Prerequisites**

None

<b>Program:</b>	Health Services Administration (BAS)	<b>CIP:</b>	51.2211
<b>Offered At:</b>	SPC	<b>Track:</b>	1
		<b>Program Length:</b>	120 Cr. Hrs.

Revised 10/28/09

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**LOWER LEVEL COURSES**

Cr. Hrs.

—

FOR ALL MAJORS: Students are strongly encouraged to select required lower division electives that will enhance their general education coursework and that will support their intended baccalaureate degree program. Students should consult with an academic advisor in their major degree area.

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Admission to Bachelor of Applied Science (B.A.S.) degree programs usually requires an Associate in Science (A.S.) or Associate in Applied Science (A.A.S.) degree in a related area. If a student has earned an Associate in Arts (A.A.) degree, or an A.S. degree, an A.A.S. degree, or its equivalent in an unrelated area, the student may be admitted on a case-by-case basis with approval of the appropriate academic administrator. Some majors may have licensure or other types of requirements prior to admittance. Due to the variance in specialized B.A.S. degree programs and concentrations, students are strongly encouraged to consult with an academic advisor at the B.A.S degree-granting institution.

**APPENDIX I**  
**Program of Study-Applied Health Sciences**

**Bachelor of Applied Science in Applied Health Sciences**  
**Upper Level Courses**

**Bachelor of Applied Science in Applied Health Sciences**  
**Upper Level Courses**

	Common Upper Level Core Courses	6 credits
HSA 4850	Internship/Capstone Project	3 credits
ENC 3210	Technical Writing	3 credits
	<b>Advanced Allied Health Core Requirement</b>	27credits
HSA 3111	US Healthcare Systems	3 credits
HSA 3180	Management for Health Professionals	3 credits
HSA 3191	Healthcare Automation & Technology	3 credits
HSA 4170	Healthcare Finance	3 credits
HSA 4340	Human Resources Management in Health Services Organizations	3 credits
HSA 4383	Quality Improvement in Healthcare	3 credits
HSA 3222	Management of Long-term Care Facilities	3 credits
HSC 3201	Community Health	3 credits
HSC 3243	Health Education &Promotion	3 credits
	<b>Advanced Allied Health Electives</b>	6 credits
HSA 3502	Healthcare Risk Management	3 credits
HSA 3702	Healthcare Research	3 credits
HSA 4652	Ethics in Healthcare	3 credits
GEY 2000	Introduction to Gerontology	3 credits
GEY 3625	Sociological Aspects of Aging	3 credits
HSC 4500	Epidemiology	3 credits
HSC 3661	Therapeutic Communication: Skills with Patients, Families and the Healthcare Team	2 credits
HSC 4184	Healthcare Leadership	3 credits
HSC 4404	Medical Disaster Management	3 credits
HSC 3801	Clinical Observation/Volunteer Work	1 credit
	<b>Biomedical Sciences Core Requirements</b>	24 credits
MCBC 3020	Biology of Microorganisms & Lab	4 credits
BCH 4024	Introduction to Biochemistry & Molecular Biology	4 credits
PCB 3063	Genetics	3 credits
HSC 3801	Clinical Observation/Volunteer Work	1 credit
	Choose Option A or Option B	12 credits
	OPTION A	
	CHMC 3120 Analytical Chemistry w/ lab	4 credits
	CHMC 4410 Physical Chemistry w/ lab	4 credits
	BSCC 4422Methods & Applications in Biotechnology	4 credits
	OPTION B	
	PHC 4021 Emerging & Infectious Diseases	3 credits
	PCB 4233 Immunology	3 credits
	HSC 3702 Healthcare Research	3 credits
	HSC 4500 Epidemiology	3 credits
	<b>Biomedical Electives</b>	9 credits
HSA 3502	Ethics in Healthcare	3 credits

HSC 3537	Health & Medical Terminology	3 credits
HSC 4184	Healthcare Leadership	3 credits
HSC 4404	Medical Disaster Management	3 credits
BSC 3424	Nanotechnology	3 credits
BSC 4434	Bioinformatics	3 credits
BSC 4870	Principles of Pharmacology	3 credits
PCB 3134	Cell Biology	3 credits
PCB 4234	Biology of Cancer	3 credits
BSC 3910	Individual Mentored Research in Biology/Biotechnology	1-3 credits
CHMC 4139	Bio-analytical Instrumentation w/Lab	4 credits
ANSC 3006	Introduction to Animal Science	4 credits
ANS 3440	Principles of Animal Nutrition	4 credits
ANS 4905	Individual Mentored Research Animal Science	1-4 credits
ZOO 4232	Comparative Parasitology	3 credits
ZOOC 4603	Embryology/Development	5 credits
ZOO 4905	Individual Mentored Research in Zoology	1-4 credits

\*Associate in Science degree holders must complete the 36 credit hour general education requirement for Eastern Florida State College. Visit the [General Education Requirements](#) for details.

**NOTE:** Admission for the Healthcare Management specialization requires an earned Associate in Science degree in a health-related program similar to the following programs offered at EFSC: Dental Assisting Technology and Management, Dental Hygiene, Emergency Medical Services, Medical Laboratory Technology, Nursing RN, Radiography, Veterinary Technology and Health Information Technology. Students with other health-related associate degrees or Associate in Arts degree with documented health care work experience may be admitted on a case-by-case basis but may have to take additional coursework before being eligible for upper-division courses.

**Lower Division:** 60 credits (AA or AS)  
**Lower Division level specialized courses:** 21 credits general education for AS degree graduates or technical electives from the approved list for AA degree graduates  
**Upper division:** 39 credits total comprised of 33 credits in core courses and 6 credits in electives.

### Bachelor of Applied Science in Advanced Allied Health Courses by Term

Year 3		
<b>Semester 1/Total Credit Hours: 15</b>		
<i>HSA 3111</i>	<i>United States Healthcare Systems</i>	3 credits
<i>HSA 3180</i>	<i>Management for Health Professionals</i>	3 credits
<i>HSA 3191</i>	<i>Healthcare Automation &amp; Technology</i>	3 credits
<i>HSC 3243</i>	<i>Health Education &amp; Promotion</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Semester 2/Total Credit Hours: 15</b>		
<i>HSA 4170</i>	<i>Healthcare Finance</i>	3 credits
<i>HSA 4383</i>	<i>Quality Improvement in Healthcare</i>	3 credits
<i>ENC 3254</i>	<i>Writing in Health Professions</i>	3 credits
<i>HSC 3201</i>	<i>Community Health</i>	3 credits

XXX XXXX	General Education/Technical Elective	3 credits
<b>Year 4</b>		
<b>Semester 1/Total Credit Hours: 15</b>		
HSA 4340	<i>Human Resources Management in Health Services Organizations</i>	3 credits
HSA 3222	<i>Management of Long Term Care Facilities</i>	3 credits
XXX XXXX	<i>Healthcare Elective</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Semester 2/Total Credit Hours: 15</b>		
HSA 4850	<i>Internship/Capstone</i>	3 credits
XXX XXXX	<i>Healthcare Elective</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Total Credits for the Program</b>		
Articulated credits from Associate's degree		60
Credits from Year 3 and 4		60
<b>Total Credits</b>		<b>120</b>

**Bachelor of Applied Science in Biomedical Science  
Courses by Term Biological Science Track**

<b>Year 3</b>		
<b>Semester 1/Total Credit Hours: 13</b>		
MCBC 3020	<i>Biology of Microorganisms &amp; Lab</i>	4credits
MCB 4203	<i>Bacterial &amp; Viral Pathogens</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Semester 2/Total Credit Hours: 16</b>		
BCH 4024	<i>Introduction to Biochemistry &amp; Molecular Biology</i>	4 credits
PCB 4233	<i>Immunology</i>	3 credits
HSC 3702	<i>Healthcare Research</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Year 4</b>		
<b>Semester 1/Total Credit Hours: 15</b>		
PCB 3063	<i>Genetics</i>	3 credits
HSA 4850	<i>Epidemiology</i>	3 credits
XXX XXXX	<i>Biomedical Elective</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Semester 2/Total Credit Hours: 16</b>		
HSA 4850	<i>Internship/Capstone Project</i>	3 credits
HSC 3801	<i>Clinical Observation/Healthcare Volunteer work</i>	1 credit
ENC 3210	<i>Technical Writing</i>	3 credits
XXX XXXX	<i>Biomedical Elective</i>	3 credits
XXX XXXX	<i>Biomedical Elective</i>	3 credits
XXX XXXX	General Education/Technical Elective	3 credits
<b>Total Credits for the Program</b>		
Articulated credits from Associate's degree		60
Credits from Year 3 and 4		60
<b>Total Credits</b>		<b>120</b>

**Bachelor of Applied Science in Biomedical Science  
Courses by Term Biotechnology Track**

<b>Year 3</b>		
<b>Semester 1/Total Credit Hours: 14</b>		
<i>MCBC 3020</i>	<i>Biology of Microorganisms &amp; Lab</i>	4credits
<i>CHMC 3120</i>	<i>Analytical Chemistry w/Lab</i>	4 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<b>Semester 2/Total Credit Hours: 14</b>		
<i>BCH 4024</i>	<i>Introduction to Biochemistry &amp; Molecular Biology</i>	4 credits
<i>CHMC 4410</i>	<i>Physical Chemistry w/lab</i>	4 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<b>Year 4</b>		
<b>Semester 1/Total Credit Hours: 16</b>		
<i>PCB 3063</i>	<i>Genetics</i>	3 credits
<i>BSCC 4422</i>	<i>Methods &amp; Applications in Biotechnology w/Lab</i>	4 credits
<i>XXX XXXX</i>	<i>Biomedical Elective</i>	3 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<b>Semester 2/Total Credit Hours: 16</b>		
<i>HSA 4850</i>	<i>Internship/Capstone Project</i>	3 credits
<i>HSC 3801</i>	<i>Clinical Observation/Healthcare Volunteer work</i>	1 credit
<i>ENC 3210</i>	<i>Technical Writing</i>	3 credits
<i>XXX XXXX</i>	<i>Biomedical Elective</i>	3 credits
<i>XXX XXXX</i>	<i>Biomedical Elective</i>	3 credits
<i>XXX XXXX</i>	General Education/Technical Elective	3 credits
<b>Total Credits for the Program</b>		
Articulated credits from Associate's degree		60
Credits from Year 3 and 4		60
<b>Total Credits</b>		<b>120</b>

**APPENDIX J**  
**Program Course Development Timeline for Advanced Allied Health**

<b>COURSE</b>		<b>DEVELOPED</b>	<b>OFFERED</b>	<b>DEVELOPMENT FACULTY</b>
HSA 3111	United States Healthcare Systems	Fall 2012	Fall 2013	Dr. Kathinka Babb
HSA 3180	Management for Health Professionals	Fall 2012	Fall 2013	Wayne Brown
HSA 3191	Healthcare Automation and Technology	Fall 2012	Fall 2013	Dr. Kathinka Babb
HSA 3222	Management of Long-term Care Facilities	Fall 2014	Fall 2015	TBD
HSA 4170	Healthcare Finance	Fall 2012	Fall 2013	Wayne Brown
HSA 4340	Human resources Management in Health Services Organizations	Fall 2014	Fall 2015	Wayne Brown
HSA 4383	Quality Improvement in Healthcare	Fall 2013	Fall 2014	Dr. Kathinka Babb
HSA 4652	Ethics in Healthcare	Fall 2014	Fall 2015	Dr. Kathinka Babb
HSA 4850	Internship/Capstone Project	Fall 2013	Fall 2014	Wayne Brown
HSC 3201	Community Health	Fall 2013	Fall 2014	Dr. Kathinka Babb
HSC 3243	Health Education & Promotion	Fall 2013	Fall 2014	Dr. Kathinka Babb
ENC 3210	Technical Writing	Fall 2013	Fall 2014	Tony Akers
HSA 3502	Healthcare Risk Management	Fall 2014	Fall 2015	Wayne Brown
HSA 3702	Healthcare Research	Fall 2013	Fall 2014	Dr. Kathinka Babb

**Appendix J**  
**Program Course Development Timeline for Biomedical Sciences**

<b>COURSE</b>		<b>DEVELOPED</b>	<b>OFFERED</b>	<b>DEVELOPMENT FACULTY</b>
MCBC 3020	Biology of Microorganisms & Lab	Fall 2013	Fall 2014	Dr. Joshua Ojwang/Dr. Chris Petrie
BCH 4024	Introduction to Biochemistry & Molecular Biology	Fall 2013	Spring 2014	Dr. Joshua Ojwang/Dr. Chris Petrie
PCB 3063	Genetics	Fall 2013	Fall 2014	Dr. Melissa Liechty/James Bottesch
ENC 3210	Technical Writing	Fall 2014	Fall 2015	Tony Akers
HSC 3801	Clinical Observation/Healthcare Volunteer Work	Fall 2014	Spring 2016	Wayne Brown
CHMC 3120	Analytical Chemistry w/ lab	Fall 2013	Fall 2014	Dr. Donna Iannotti/Dr. Cristina Moisii
CHMC 4410	Physical Chemistry	Fall 2013	Spring 2014	Dr. Tatiana Zuvich
HSA 4850	Internship/Capstone Project	Fall 2013	Spring 2016	Wayne Brown
HSA 4930	Methods & Applications in Biotechnology w/ Lab III	Fall 2014	Fall 2016	James Bottesch
PHC 4031	Emerging & Infectious Diseases	Fall 2014	Fall 2015	Dr. Laura Earle
PCB 4233	Immunology	Fall 2013	Spring 2015	James Bottesch
HSA 3702	Healthcare Research	Fall 2013	Fall 2014	Dr. Kathinka Babb
HSA 4000	Epidemiology	Fall 2014	Fall 2015	Dr. Laura Earle
HSA 3502	Ethics in Healthcare	Fall 2013	Fall 2014	Dr. Kathinka Babb
HSC 4184	Healthcare Leadership	Fall 2013	Fall 2014	Wayne Brown
HSC 4404	Medical Disaster Management	Fall 2014	Fall 2015	TBD
BSC 3424	Nanotechnology	Fall 2014	Fall 2015	TBD
BSC 4434	Bioinformatics	Fall 2014	Fall 2015	TBD
BSC 4870	Principles of Pharmacology	Fall 2014	Fall 2015	TBD
PCB 3134	Cell Biology	Fall 2014	Fall 2015	James Bottesch
PCB 4234	Biology of Cancer	Fall 2014	Fall 2015	James Bottesch
BSC 3910	Individual Mentored Research in Biology/Biotechnology	Fall 2014	Fall 2015	TBD
CHMC 4139	Bio-analytical Instrumentation w/Lab	Fall 2014	Fall 2015	Dr. Donna Iannotti
ANSC 3006	Introduction to Animal Science	Fall 2014	Fall 2015	Dr. Laura Earle
ANS 3440	Principles of Animal Nutrition	Fall 2014	Fall 2015	Dr. Laura Earle
ANS 4905	Individual Mentored Research Animal Science	Fall 2014	Fall 2015	Dr. Laura Earle
ZOO 4603	Comparative Parasitology	Fall 2014	Fall 2015	Dr. Laura Earle
ZOOC 4603	Embryology/Development	Fall 2014	Fall 2015	TBD
ZOO 4905	Individual Mentored Research in Zoology	Fall 2014	Fall 2015	TBD

**APPENDIX K**  
**Program Learning Outcomes**

**BACHELORS OF APPLIED SCIENCE DEGREE APPLIED HEALTH SCIENCES ADVANCED ALLIED  
HEALTH  
PROGRAM LEARNING OUTCOMES**

**Program Learning Outcome #1**

Assess the relative health effects of environment, socioeconomic conditions, behavior, and the availability of health services on the human body.

Core Ability Supported: Think Critically and Solve Problems

Linked Course: HSA 3222 Management of Long-term Care Facilities

**Program Learning Outcome #2**

Explain how a team approach that is coordinated, comprehensive and continuous facilitates successful treatment outcomes.

Core Ability Supported: Work Cooperatively

Linked Course: HSA 3182 Management for Health Professionals

**Program Learning Outcome #3**

Compare the wellness model and medical model of healthcare.

Core Ability Supported: Think critically and solve problems

Linked Course: HSC 3243 Health Education & Promotion

**Program Learning Outcome #4**

Explain the process of active participation in healthcare from a provider, patient, family, and community viewpoint.

Core Ability Supported: Process information

Linked Course: HSC 3201 Community Health

**Program Learning Outcome #5**

Assess the impact of effective and ineffective applications of technology in health services.

Core Ability Supported: Think critically and solve problems

Linked Course: HSA 3191 Healthcare Automation & Technology

**Program Learning Outcome #6**

Write a technical paper expected of a healthcare manager.

Core Ability Supported: Communicate effectively

Linked Course: ENC 3254

**Program Learning Outcome #7**

Analyze health services from social, workforce, financial, regulatory, technological, and organizational viewpoints.

Core Ability Supported: Process information

Linked Course: HSA 4850 Internship/Capstone Project

**Program Learning Outcome #8**

Commit to a code of professional ethics when providing services to clients, families and communities.

Core Ability: Model Ethical & Civic Responsibility

Linked Course: HAS 3180 Management for Health Professionals

**Program Learning Outcome #9**

Utilize culturally competent strategies and practices that respect the cultural, social, religious, racial, and ethnic diversity of the patient and family.

Core ability: Model Ethical & Civic Responsibility

Linked Course: HSA 4340 Human Resources Management in Health Services Organizations

**BACHELORS OF APPLIED SCIENCE DEGREE BIOMEDICAL SCIENCE  
PROGRAM LEARNING OUTCOMES**

**Program Learning Outcome #1**

Analyze biological processes at all levels of organization: molecular, cellular and microbial, organismal, population, and ecosystem.

Core Ability Supported: Think Critically and Solve Problems

Linked Course: BCH 4024 Introduction to Biochemistry & Molecular Biology

**Program Learning Outcome #2**

Write a technical biological/bio-medical paper.

Core Ability Supported: Work Cooperatively

Linked Course: ENC 3210 Technical Writing

**Program Learning Outcome #3**

Explain the importance of unifying concepts in biology, including cell theory, genetics and evolution.

Core Ability Supported: Think critically and solve problems

Linked Course: PCB 3063 Genetics

**Program Learning Outcome #4**

Apply laboratory skills in support of bio-medical systems.

Core Ability Supported: Process information

Linked Course: BCH 4024 Introduction to Biochemistry & Molecular Biology

**Program Learning Outcome #5**

Evaluate historical developments and research in the biological and bio-medical sciences.

Core Ability Supported: Think critically and solve problems

Linked Course: HSA 4850 Internship/Capstone Project

**Program Learning Outcome #6**

Analyze data and scientific literature.

Core Ability Supported: Communicate effectively

Linked Course: ENC 3210 Technical Writing

**Program Learning Outcome #7**

Apply scientific methods in laboratory-based and field-based inquiry.

Core Ability Supported: Process information

Linked Course: MCBC 3020 Biology of Micro-organisms & Lab

**Program Learning Outcome #8**

Characterize awareness of professional, ethical and global issues in a diverse society.

Core ability: Model Ethical & Civic Responsibility

Linked Course: HSC 3801 Clinical observation/Healthcare Volunteer Work

**Appendix L**  
**Brevard Labor Market Report**

**Employment Data for Occupations Linked to Applied Health Sciences  
to Advanced Allied Health**  
(2012-2020)  
Brevard County

Occupation Title (SOC Code)	Employment		Openings	
	2012	2020	Annual % Change	Average Annual
Chief Executives (11-1011)	366	377	0.38 %	10
General/Operations Managers (11-1021)	1,738	1,793	0.40%	38
Sales Managers (11-2022)	314	324	0.40%	10
Public Relations Managers (11-2031)	23	26	1.63%	1
Administrative Services Managers (11-3011)	277	311	1.53%	10
Training and Development Managers (11-3131)	28	28	0.00%	1
Food Service Managers (11-9051)	555	557	0.05%	10
Medical and Health Services Managers (11-9111)	199	238	2.45%	10
Health Educators (21-1091)	97	128	3.99%	6
First-Line Supervisor of Office and Administrative Support Workers (43-1011)	2,012	2,277	1.65%	86
First-Line Supervisors of Non-Retail Sales Workers 41-1012	611	623	0.25%	17
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products 41-4011	909	987	1.07%	31
<b>TOTAL</b>	<b>7,129</b>	<b>7,370</b>	<b>1.16%</b>	<b>230</b>

Source: <http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections>  
Florida Department of Economic Opportunity. Accessed January 2013

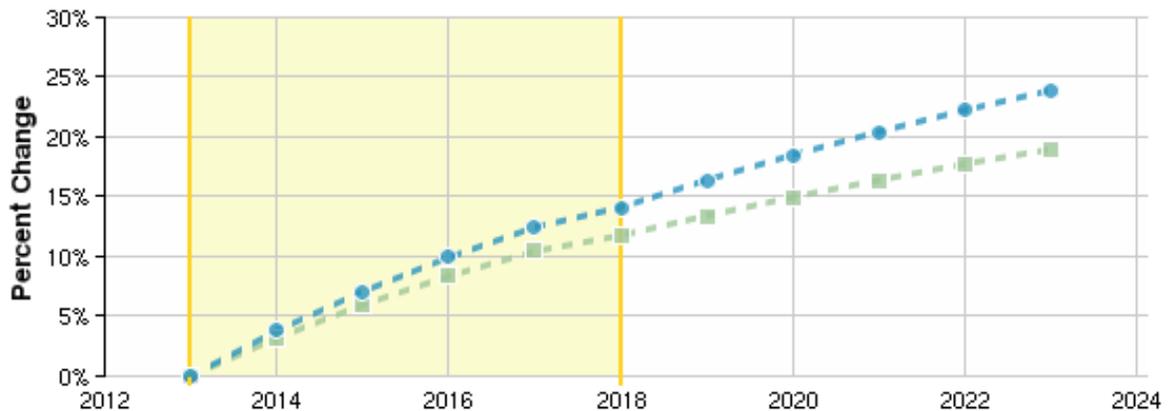
**Employment Data for Occupations Linked to Applied Health Sciences, Biomedical Science  
(2012-2018)**

**Brevard County**

<b>Occupation Title (SOC Code)</b>	<b>2012 Jobs</b>	<b>2018 Jobs</b>	<b>Annual Openings</b>	<b>Total Projected Openings</b>
Animal Scientists (19-1011)	36	40	3	4
Food Scientists and Technologists (19-1012)	41	48	3	7
Biological Scientists (19-1020)	768	873	40	105
Biochemists and Biophysicists (19-1021)	296	357	20	61
Microbiologists (19-1022)	95	112	6	17
Zoologists and Wildlife Biologists (19-1023)	263	277	9	14
Epidemiologists (19-1041)	14	17	1	3
Medical Scientists, Except Epidemiologists (19-1042)	731	904	40	173
Miscellaneous Life Scientists (19-1099)	38	43	6	5
Agricultural and Food Science Technicians (19-4011)	69	73	3	4
Biological Technicians (19-4012)	298	349	21	51
Chemical Technicians (19-4030)	353	371	10	18
Environmental Science and Protection Technicians, Including Health (19-4091)	317	352	21	35
Life, Physical, and Social Science Technicians, All Other (19-4099)	428	467	27	39
<b>Total for all Related Occupations</b>	<b>3,860</b>	<b>4,410</b>	<b>215</b>	<b>550</b>

Source: EMSI Complete Employment – 2013

**Regional Growth Rate Data for Medical and Health Services Managers-(11-3131) (2013-2023)**



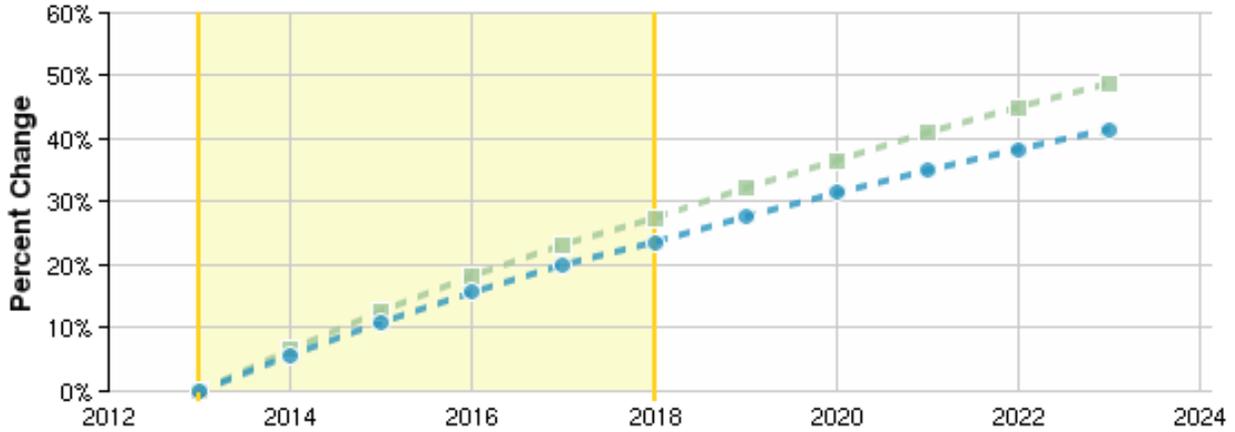
<b>Region</b>	<b>% Change</b>
● Brevard/surrounding	24.0%
■ ● Brevard County Only	18.0%

Source: Economic Modeling Specialists International

[www.economicmodeling.com](http://www.economicmodeling.com)

Brevard County is represented by the green squares and the blue circles represent Brevard's surrounding areas.

## Regional Growth Rate Data for Medical Scientists, Except Epidemiologists (2013-2018)



Region	% Change
● Brevard/surrounding	40.05%
■ ● Brevard County Only	49.0%

Source: Economic Modeling Specialists International  
[www.economicmodeling.com](http://www.economicmodeling.com)

Brevard County is represented by the green squares and the blue circles represent Brevard's surrounding areas

## Recent Graduates in the Discipline Area State University System

Program and CIP Code	University of Central Florida Graduates 2012
Health/Healthcare Administrations/Management, Allied Health and medical Assisting Services, Other (CIP 51.0701)	263
Hospital and Health Care Facilities, Administration/Management (CIP 51.0702)	0
Health Information/medical Records, Administration/Administrator (CIP 51.0706)	37
Nursing Administration (CIP 51.3802)	0
Biomedical Sciences, General (26.0102)	4
Medical Microbiology and Bacteriology (26.0503)	291
Biology/Biological Sciences, General (26.0101)	278
Chemistry, General (40.0501)	25
Biotechnology (26.1201)	24
<b>Total</b>	<b>922</b>

Source: EMSI 2013

**Recent Graduates in the Discipline Area  
Nonpublic Postsecondary Institutions**

<b>Program and CIP Code</b>	<b>Florida Institute of Technology Graduates (2010-11)</b>	<b>Everest, Melbourne &amp; South Florida &amp; North Orlando</b>	<b>University of Phoenix-Central Florida Campus</b>	<b>Stetson University</b>
Health/Healthcare Administrations (CIP 51.0701)	0	25	0	0
Operations Management and Supervision (CIP 52.0205) Health Care Facilities Management (CIP 51.0702)	0	0	27	0
Business Administration Management (CIP 52.0299) Health Information Administration (CIP 51.0706)		0	0	0
Nursing Administration (CIP 51.3802)	0	0	0	0
<b>Total</b>	0	25	27	0

**Recent Graduates in the Discipline Area  
Nonpublic Postsecondary Institutions**

<b>Program and CIP Code</b>	<b>Florida Institute of Technology Graduates (2010-11)</b>	<b>Adventist University of Health Sciences</b>	<b>Rollins</b>	<b>Stetson University</b>	<b>Bethune-Cookman</b>
Biomedical Sciences, General (26.0102)	11	14	0	0	0
Biology/Biological Sciences, General (26.0101)	2	0	13	15	18
Chemistry, General (40.051)	4	0	7	9	9
Molecular Biology (26.0204)	11	0	0	4	0
Biochemistry (26.0202)	9	0	9	6	0
<b>Total</b>	37	14	29	34	18

Source: EMSI

**APPENDIX M**  
**Student Survey Results**

**Four-year Degree Student Survey**

A five-question survey was developed by the Office of Enrollment Management and Student Success, to gauge student perceptions about offering four-year degrees at Eastern Florida State College (EFSC). The delivery of the survey was facilitated via EFSC's online student system, My EFSC. The survey was available to all EFSC students during the dates of March 21 through April 21, 2011.

Based on 1,986 responses:

- 1) Should Eastern Florida State College offer four-year degrees?

<b>Yes</b>	<b>1,831</b>	<b>(92%)</b>
No	119	(6%)
No response	8	(2%)

- 2) Would you continue your education at Florida State College if four-year degrees were available?

<b>Yes</b>	<b>1688</b>	<b>(85%)</b>
No	192	(10%)
No response	106	(5 %)

- 3) If four-year degrees were available at Eastern Florida State College, what method of instruction would you prefer?

On-campus instruction	320	(16%)
Online instruction	117	(6 %)
<b>Both On-campus and Online instruction</b>	<b>791</b>	<b>(73%)</b>
No response	98	(5%)

- 4) How many Eastern Florida State College campuses should offer four-year degrees?

One campus	63	(3%)
Two campuses	138	(7%)
One North-based campus <u>and</u> one South-based campus	373	(19%)
<b>All campuses</b>	<b>1302</b>	<b>(66%)</b>
No response	110	(5%)

- 5) In what area of study should Eastern Florida State College offer four-year degrees?

Arts and Humanities	150	(8%)
Business	322	(16%)
<b>Health and Social Services</b>	<b>764</b>	<b>(39%)</b>
Technology	346	(17%)
Other	279	(14%)
No response	126	(6%)

**APPENDIX N1**  
**Business Survey Results 2012**

**Four-year Degree Business Survey**

A survey was developed by the Office of Planning and Assessment to gauge local business perceptions about offering four-year degrees at Eastern Florida State College (EFSC). Two surveys were sent out to represent the areas of business and health. The delivery of the survey was facilitated via Zoomerang an online survey system used by EFSC. The survey was sent out to approximately 3700 employers through our online Career Network, Brevard Workforce and email during the dates of January 11, 2012 through February 2, 2012.

**Business Survey: 83 Responses**

<b>1. Please indicate the Industry sector that best represents your company.</b>			
Architecture & Construction		5	6%
Arts, Audio/Video Technology & Communications		6	7%
Business Management & Administration, Finance, Marketing		3	4%
Education & Training		7	9%
Government & Public Administration		6	7%
Health Science & Human Services		7	9%
Hospitality & Tourism		2	2%
Information Technology, Science, Technology, Engineering & Mathematics		8	10%
Law, Public Safety, Corrections & Security		7	9%
Manufacturing		6	7%
Transportation, Distribution & Logistics		1	1%
Other, please specify		24	29%
1. Maritime communications			
2. Non-profit housing ministry			
3. Fire Service			
4. Diesel Mechanic and Tire Specialist			
5. Engineering, Technical Services, Manufacturing, Defense Contractor			
6. Work with age 55+ low income helping them to transition back into the workforce.			
7. Humane Society			
8. defense gov't contractor			
9. shelter			
10. Aerospace			
11. Automotive Dealership			
12. Marketing			
13. Interior Design			
14. APPLIANCE REPAIR			
15. Food sale			
16. retail sales			
17. non-profit (Animal Welfare)			
18. Veterinary Science			
19. veterinary			
20. Veterinary			
21. Veterinary Hospital			
22. Veterinary			
23. Sales			
24. Event planning			
<b>Total</b>		<b>83</b>	<b>100%</b>
<b>2. Please indicate the number of employees that work for your company.</b>			

1-50	47	57%
50-100	7	8%
100-150	8	10%
150-200	4	5%
200-250	1	1%
Over 250	16	19%
<b>Total</b>	83	100%

**3. Does your company have jobs that require a minimum of a bachelor's degree in supervisory related field? If no, skip to question number 9.**

Yes	37	48%
No	40	52%
<b>Total</b>	77	100%

**4. If yes, how many positions do you currently have?**

1-4	12	28%
5-9	11	26%
10-14	6	14%
15-19	1	2%
20 or more	13	30%
<b>Total</b>	43	100%

**5. Please list the job titles of the Management or Supervisory positions in your company that require a bachelor's degree.**

37 Responses

1. n/a
2. Supervisor, Manager, Senior Manager, Director, VP
3. Director, North American Operations Business Manager Operations Manager
4. Accounting Manager Creative Director
5. Senior Controller Account Receivable Manager Financial Planning & Analysis Manager Employee Network Services Mgr. Director Network Engineering Chairman AP Manager Assistant Controller Chief Financial Officer Chief Technical Officer CS Supervisor Director of Sales-Americas Hardware Engineer Manager HR Manager Installation Operations Manager Interim VP of Product Management Logistics Manager Operations Supervisor President Quality Assurance Director Regional Sales Mgr.-Americas Regional Install Supervisor Regulatory Director Senior VP Engineering Ship Admin Manager Site Manager Sr VP of Customer Service Training & Documentation Mgr. VP of Operations VP Software Development VSAT Manager
6. It isn't necessarily a "requirement" as much as it is a "guideline". Budget Manager, HR Manager, Administrative Services Manager, Family Court Manager, Court Operations Manager, Trial Court Administrator, Trial Court Law Clerk, Senior Trial Court Law Clerk, Mediation Coordinator, General Magistrate/Hearing Officer, Director of Digital Court Reporting, Court Reporter, Director of Alternative Dispute Resolution, Drug Court Manager, Court Program Specialist II, Senior Court Program Specialist, and Senior Court Analyst II
7. Assistant Fire Chief Fire Chief
8. Assistant Fire Chief Deputy Fire Chief Fire Chief
9. Operations Commander Fire Chief
10. Chief Administrative Officer Chief Operating Officer Chief Financial Officer Site Supervisor
11. Engineer
12. None
13. All Coordinators Nursing Directors Etc.
14. All Coordinators Nursing Directors Etc.
15. Engineering Manager, Marketing Manager, Sales Manager

16. Media Buyer Business Manager Art Director		
17. 1. Marketing Account Manager; (BSEE) req'd. 2. Bookkeeper.		
18. HR Director Engineering Manager Manufacturing Manager Warehouse Manager Program Manager Quality Manager Training Manager		
19. Vice President positions All managers Project managers Leads ( working for Project Managers)		
20. COO/General Manager CFO/Secretary Treasurer Club Manager Residential Manager Golf Course Superintendent		
21. President & CEO; Treasurer; Chief Financial Officer; Chief Operating Officer; Vice President; Director of Government Relations; Contracts Manager; Engineering & Safety Manager; Deputy Director; Accounting Manager; Project Manager		
22. Vice Presidents Managers Project Managers Lead Custodians		
23. Subject Matter Expert		
24. Administrator Case Manager		
25. Chemist		
26. Teacher, Resource Teacher, Dean, Principal, Technical Support Specialist, Network Administrator		
27. Account supervisor, producer, senior artist, creative director		
28. President CFO Interior Design Director CEO Operations Director Accounting		
29. Engineering Manager Engineering Supervisor Fabrication Manager Assembly Manager Production Manager Operations Manager Lamination Manager		
30. All of the Directors of the various departments		
31. President - a degree or significant business & production experience is very helpful, but not required.		
32. Executive Director Shelter Manager Media Relations Manager Thrift Shop Manager (4 positions) Volunteer Coordinator Clinic Coordinator Office Manager Kennel Manager		
33. Practice Manager		
34. Project Director Group Manager Leads		
35. Veterinarian Medical Technologist		
36. Researcher		
37. There are hundreds of positions which require a degree. Most are technical/specialist related degrees		
<b>6. How many openings for such positions do you anticipate having each year?</b>		
1-4	29	76%
5-9	3	8%
10-14	2	5%
15-19	0	0%
20 or more	4	11%
<b>Total</b>	<b>38</b>	<b>100%</b>
<b>7. Do you currently have a pool of qualified candidates for these positions?</b>		
Yes	20	47%
No	23	53%
<b>Total</b>	<b>43</b>	<b>100%</b>
<b>8. What is the average starting salary for such positions?</b>		
\$40,000-\$50,000	16	42%
\$51,000-\$60,000	8	21%
\$61,000-\$70,000	3	8%
\$71,000-\$80,000	6	16%
more than \$80,000	5	13%

<b>Total</b>		38		100%	
<b>9. Do you have any employees you would encourage to pursue a bachelor's degree?</b>					
Yes		66		82%	
No		13		18%	
<b>Total</b>		80		100%	
<b>10. When thinking about positions that would require a bachelor's degree in Management and Supervision, how would you rate the importance of each of the following area?</b>					
Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	<b>Not Important</b>			<b>Highly Important</b>	
Administration/Business	2 3%	5 6%	10 13%	26 33%	35 45%
Research	13 18%	9 12%	21 29%	17 23%	13 18%
Management	1 1%	4 5%	10 13%	30 39%	31 41%
Personnel Management	3 4%	5 7%	14 19%	23 31%	29 39%
Technology	3 4%	3 4%	12 16%	30 39%	28 37%
Communications	3 4%	1 1%	11 15%	30 41%	29 39%
Legal/Ethics	6 8%	1 1%	17 23%	19 25%	32 43%
Other, please specify	3 23%	1 8%	4 31%	2 15%	3 23%
<b>11. The following statements relate to the future growth of your company.</b>					
Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	<b>Strongly Disagree</b>			<b>Strongly Agree</b>	
The need for college graduates will grow in the next 5 years.	4 5%	9 11%	27 33%	20 24%	22 27%
We have difficulty finding applicants with the knowledge, expertise and educational background needed.	10 12%	11 13%	26 32%	18 22%	17 21%
Our company recruits/hires recent college graduates for specific supervisory positions.	23 29%	22 28%	18 23%	11 14%	5 6%
In the next 3-5 years, a 4 year degree in Management & Supervision, as offered by Eastern Florida State College will be an important consideration in our hiring decisions.	17 21%	12 15%	26 32%	21 26%	5 6%
Our company would be interested in hiring graduates of Eastern Florida State College Management & Supervision program.	14 18%	10 13%	24 30%	26 33%	5 6%
Our company would be willing to offer internship opportunities or other mentoring relationships.	18 22%	13 16%	18 22%	14 17%	18 22%
<b>12. Eastern Florida State College welcomes any other information related to Bachelor's degrees you'd like to provide.</b>					
4 Responses					

1. I would hire someone in pursuit of a 4-year degree, especially in business or marketing. As a business owner, those are degrees needed on the administrative end of the business, but not in my day-to-day requirements. (I own a pottery studio - I need "waitresses" for the most part, but believe college students can easily learn the fundamentals of running a business, cost v. sales, overhead, etc. even in a business that doesn't require its' employees be degreed.
2. Our positions are either promotional opportunities or hires from other fire departments
3. Our degree is service specific for applied behavior analysis
4. We currently have two interns that are being paid. One helps with purchasing and product management and is going to EFSC's UCF Campus as a junior and we just hired a freshman from EFSC as sales support assistance. Would love a part time intern that knows Photo Shop.
5. We are also looking for trade skills. Welding carpentry etc.

**13. In addition to the four year programs, Eastern Florida State College is planning in increase the number of two year and other shorter term programs. Please indicate below how important your feel each of these programs would be to our local community.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Not Important				Highly Important
Audio & Video Equipment Technicians	16 21%	9 12%	24 31%	21 27%	8 10%
Aviation Maintenance & Management	10 13%	13 17%	21 28%	21 28%	11 14%
Cyber Security / Information Assurance Technician	9 12%	3 4%	10 13%	29 38%	25 33%
Diagnostic Medical Sonographers	13 17%	6 8%	14 18%	25 33%	18 24%
Electrician	10 13%	4 5%	26 34%	23 30%	13 17%
Food Service Managers	14 18%	7 9%	31 41%	16 21%	8 11%
Health Technologists & Technicians	12 16%	6 8%	11 15%	20 27%	26 35%
Helicopter Pilot	19 25%	18 24%	22 29%	13 17%	4 5%
Pharmacy Technician	13 17%	4 5%	17 22%	27 36%	15 20%
Physical Therapist Assistant	13 17%	3 4%	21 28%	18 24%	21 28%
Manufacturing/Machining	12 16%	6 8%	30 39%	16 21%	12 16%
Police, Fire & Ambulance Dispatchers	11 14%	7 9%	20 26%	24 31%	15 19%
Systems Technician	9 12%	4 5%	23 30%	27 35%	14 18%

**14. Eastern Florida State College welcomes any additional suggestions for two year or shorter term programs.**

4 Responses

1. Human Resources-related program
2. Human Resources
3. Medical, Technology (web...back end coding) and Hospitality are industries that we need quality education in.
4. If you do not have it: Graphic Arts, Sales management for the new sales rep.

5. Trades like electrician welder fence installer security technician would be important to our company.

**Health Care Survey: 26 Responses**

**1. Please indicate the number of employees that work for your company.**

1-50	8	32%
50-100	3	12%
100-150	3	12%
150-200	1	4%
200-250	2	8%
Over 250	8	32%
<b>Total</b>	25	100%

**2. Does your company have jobs that require a minimum of a bachelor's degree in either Nursing or Health Care Administration? If no, skip to question number 9.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	<b>Yes</b>	<b>No</b>
Nursing	9 36%	16 64%
Health Care Administration	6 26%	17 74%

**3. If yes, how many positions do you currently have?**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20 or more</b>
Nursing	6 67%	1 11%	0 0%	0 0%	2 22%
Health Care Administration	5 71%	0 0%	0 0%	0 0%	2 29%

**4. Please list the job titles of the positions in your company that require a bachelor's degree in Nursing.**

- 11 Responses
1. Soon to be Nursing Manager, Nursing Director
  2. Manager, Director, Exec Director, VP
  3. Infection Control Practitioner Nurse Manager
  4. Director of Nursing
  5. none
  6. Practical Nursing Program Instructor
  7. RN
  8. Director of Nursing
  9. N/A
  10. RN
  11. Registered Nurse

**5. Please list the job titles of the positions in your company that require a bachelor's degree in Health Care Administration.**

10 Responses
1. Nursing Director can also have a HC Admin degree
2. Manger, Director, Exec Director, VP
3. All Leadership positions require a minimum of a BS - not necessarily in HCA.
4. nursing home administrator
5. none
6. Biller
7. Campus Administrator Health center Administrator
8. N/A
9. Assisted Living Administrator Assisted Living Manager
10. None

**6. How many openings for such positions do you anticipate having each year?**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	1-4	5-9	10-14	15-19	20 or more
Nursing	4 67%	1 17%	0 0%	0 0%	1 17%
Health Care Administration	5 100%	0 0%	0 0%	0 0%	0 0%

**7. Do you currently have a pool of qualified candidates for these positions?**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Yes	No
Nursing	5 50%	5 50%
Health Care Administration	3 38%	5 62%

**8. What is the average starting salary for such positions?**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	\$40,000-\$50,000	\$51,000-\$60,000	\$61,000-\$70,000	\$71,000-\$80,000	More than \$80,000
Nursing	5 56%	2 22%	1 11%	0 0%	1 11%
Health Care Administration	1 14%	1 14%	3 43%	1 14%	1 14%

**9. Do you have any employees you would encourage to pursue a bachelor's degree?**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Yes	No
Nursing	11 53%	9 45%
Health Care Administration	9 53%	8 47%

**10. When thinking about positions that would require a bachelor's degree in Health Care, how would you rate the importance of each of the following areas?**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Not Important				Highly Important
Administration/Business	3 15%	0 0%	4 20%	2 10%	11 55%
Research	3 18%	3 18%	6 35%	3 18%	2 12%
Management	2 10%	1 5%	3 15%	5 25%	9 45%
Health Care	1 5%	0 0%	3 16%	4 21%	11 58%
Technology	1 6%	4 22%	2 11%	6 33%	5 29%
Communications	3 17%	1 6%	2 11%	6 33%	6 35%
Legal/Ethics	1 6%	1 6%	4 22%	6 33%	6 33%
Other, please specify	2 33%	0 0%	1 17%	2 33%	1 17%

**11. The following statements relate to the future growth of your company.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Strongly Disagree				Strongly Agree
The need for college graduates will grow in the next 5 years.	3 12%	0 0%	9 36%	9 36%	4 16%
We have difficulty finding applicants with the knowledge, expertise and educational background needed.	5 22%	3 13%	6 26%	7 30%	2 9%
Our company recruits/hires recent college graduates for specific supervisory positions.	6 24%	8 32%	5 20%	4 16%	2 8%
In the next 3-5 years, a 4 year degree in Nursing, as offered Eastern Florida State College will be an important consideration in our hiring decisions.	8 36%	2 9%	4 17%	6 26%	3 13%
In the next 3-5 years, a 4 year degree in Health Care Administration, as offered by Eastern Florida State College will be an important consideration in our hiring decisions.	8 36%	1 5%	5 23%	7 32%	1 5%
Our company would be interested in hiring graduates of the Eastern Florida State College Nursing program.	5 25%	2 10%	4 20%	2 10%	7 35%
Our company would be interested in hiring graduates of the Eastern Florida State College Health Care Administration program.	7 32%	1 5%	7 32%	4 18%	3 14%
Our company would be willing to offer internship opportunities or other mentoring relationships.	10 43%	2 9%	2 9%	2 9%	7 30%

**12. Eastern Florida State College welcomes any other information related to Bachelor's degrees you'd like to provide.**

5 Responses

1. I would like to hire only BSN's but due to the shortage that is not possible
2. didn't know EFSC had a 4 year degree program
3. We look for criminal justice education and/or training. We have also experienced great success in the hiring of general studies or liberal arts graduates with a track record of successfully learning. In short the critical thinking skills are as important as training in a specific fie
4. Got to love EFSC. Programs they offer and their low costs
5. Our Registered Nurse position requires a person to have a degree before even being considered and we only have one position so some of the questions above are an N/A answer

**13. In addition to the four year programs Eastern Florida State College is planning to increase the number of two year and other shorter term programs. Please indicate below how important you feel each of these programs would be to our local community.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Not Important				Highly Important
Audio & Video Equipment Technicians	7 29%	2 8%	6 25%	6 25%	3 12%
Aviation Maintenance & Management	9 38%	0 0%	7 29%	5 21%	3 12%
Cyber Security / Information Assurance Technician	2 8%	1 4%	6 25%	11 46%	4 17%
Diagnostic Medical Sonographers	7 29%	0 0%	7 29%	9 38%	1 4%
Electrician	8 33%	3 12%	5 21%	8 33%	0 0%
Food Service Manager	6 25%	3 12%	9 38%	5 21%	1 4%
Health Technologists & Technicians	6 25%	0 0%	5 21%	10 42%	3 12%
Helicopter Pilot	10 42%	2 8%	8 33%	4 17%	0 0%
Pharmacy Technician	7 29%	0 0%	7 29%	6 25%	4 17%
Physical Therapist Assistant	7 29%	1 4%	5 21%	7 29%	4 17%
Manufacturing/Machining	7 28%	2 8%	8 32%	3 12%	5 20%
Police, Fire and Ambulance Dispatchers	9 38%	1 4%	5 21%	5 21%	4 17%
Systems Technician	4 17%	1 4%	9 38%	6 25%	4 17%

**14. Eastern Florida State College welcomes any additional suggestions for two year or shorter term programs.**

4 Responses

1. Need more qualified CNAs with a strong work ethic and knowledge base
2. My comments would be similar to those expresses previously
3. please consider a fast track for can
4. Forensics, Fingerprint Technician

**APPENDIX N2**  
**Business Survey Results 2013**

Brevard Community College New Programs Survey		
<b>1. Please indicate the industry sector that best represents your company.</b>		
Answer Options	Response Percent	Response Count
Architecture & Construction	7.0%	8
Arts, Audio/Video Technology & Communications	4.3%	5
Business Management & Administration, Finance, Marketing	7.8%	9
Education & Training	3.5%	4
Government & Public Administration	7.0%	8
Health Science & Human Services	13.0%	15
Information Technology, Science, Technology, Engineering & Mathematics	7.8%	9
Law, Pubic Safety, Corrections & Security	4.3%	5
Manufacturing	12.2%	14
Retail	4.3%	5
Transportation, Distribution & Logistics	2.6%	3
Other, please specify	26.1%	30
Other (please specify)		33
	answered question	115
	skipped question	1
<b>2. Please indicate the number of employees that work for your company.</b>		
Answer Options	Response Percent	Response Count
1-50	60.3%	70
50-100	11.2%	13
100-150	8.6%	10
150-200	6.9%	8
200-250	1.7%	2
Over 250	11.2%	13
	answered question	116
	skipped question	0
<b>3. Does your company have jobs that require a minimum of a bachelor's degree in any of the related fields listed? If no, please skip to question number 5.</b>		
Answer Options	Response Percent	Response Count
Organizational Management concentration in Public Safety Management	18.2%	6
Organizational Management concentration in Public Services Management	12.1%	4
Organizational Management concentration in Sales & Marketing	39.4%	13
Information Systems Technology concentration in Networking Services	45.5%	15
Information Systems Technology concentration in Program Development/Software Development	39.4%	13
Applied Health Science concentration in Allied Health-Occupational Therapy Assistant	6.1%	2
Applied Health Science concentration in Allied Health-Physical Therapy	6.1%	2

Assistant		
Applied Health Science concentration in Allied Health-Respiratory Therapy	3.0%	1
Applied Health Science concentration in Health Sciences Administration	18.2%	6
Applied Health Science concentration in Biomedical	18.2%	6
Other (please specify)		15
	answered question	33
	skipped question	83

4. Please answer the following about the field or fields you selected.

Current positions available?

Answer Options	1-4	5-9	10-14	15-19	20 or more	Response Count
Organizational Management concentration in Public Safety	0	0	0	0	0	0
Organizational Management concentration in Public Services Management	0	0	0	0	0	0
Organizational Management concentration in Sales & Marketing	5	1	0	0	0	6
Information Systems Technology concentration in Networking Services	3	0	0	0	0	3
Information Systems Technology concentration in Program Development/Software Development	2	0	1	0	0	3
Applied Health Science concentration in Allied Health-Occupational Therapy Assistant	1	0	0	0	0	1
Applied Health Science concentration in Allied Health-Physical Therapy Assistant	1	0	0	0	0	1
Applied Health Science concentration in Allied Health-Respiratory Therapy	0	0	0	0	0	0
Applied Health Science concentration in Health Sciences Administration	4	0	0	0	0	4
Applied Health Science concentration in Biomedical	0	0	0	0	0	0
Other as it relates to question number 3	5	0	0	0	2	7

Openings anticipated yearly?

Answer Options	1-4	5-9	10-14	15-19	20 or more	Response Count
Organizational Management concentration in Public Safety	1	0	0	0	0	1
Organizational Management concentration in Public Services Management	0	0	0	0	0	0
Organizational Management concentration in Sales & Marketing	7	0	0	0	0	7
Information Systems Technology concentration in Networking Services	3	1	0	0	0	4
Information Systems Technology concentration in Program Development/Software Development	5	0	1	0	0	6
Applied Health Science concentration in Allied Health-Occupational	1	0	0	0	0	1

Therapy Assistant						
Applied Health Science concentration in Allied Health-Physical Therapy Assistant	1	0	0	0	0	1
Applied Health Science concentration in Allied Health-Respiratory Therapy	0	0	0	0	0	0
Applied Health Science concentration in Health Sciences Administration	4	1	0	0	0	5
Applied Health Science concentration in Biomedical	3	0	0	0	0	3
Other as it relates to question number 3	4	0	0	0	2	6

Current pool of candidates?			
Answer Options	Yes	No	Response Count
Organizational Management concentration in Public Safety	0	1	1
Organizational Management concentration in Public Services Management	0	1	1
Organizational Management concentration in Sales & Marketing	4	4	8
Information Systems Technology concentration in Networking Services	2	2	4
Information Systems Technology concentration in Program Development/Software Development	1	5	6
Applied Health Science concentration in Allied Health-Occupational Therapy Assistant	0	1	1
Applied Health Science concentration in Allied Health-Physical Therapy Assistant	0	1	1
Applied Health Science concentration in Allied Health-Respiratory Therapy	0	0	0
Applied Health Science concentration in Health Sciences Administration	2	2	4
Applied Health Science concentration in Biomedical	0	1	1
Other as it relates to question number 3	3	4	7

Average starting salary?							
Answer Options	\$35,000-\$40,000	\$41,000-\$50,000	\$51,000-\$60,000	\$61,000-\$70,000	\$71,000-\$80,000	more than \$80,000	Response Count
Organizational Management concentration in Public Safety	0	1	0	1	0	0	2
Organizational Management concentration in Public Services Management	0	2	0	0	0	0	2
Organizational Management concentration in Sales & Marketing	1	4	1	1	1	0	8
Information Systems Technology concentration in Networking Services	0	2	3	1	1	0	7
Information Systems Technology concentration in Program Development/Software Development	0	4	1	1	2	0	8

Applied Health Science concentration in Allied Health-Occupational Therapy Assistant	0	0	1	0	0	0	1
Applied Health Science concentration in Allied Health-Physical Therapy Assistant	0	0	0	1	0	0	1
Applied Health Science concentration in Allied Health-Respiratory Therapy	0	0	0	0	0	0	0
Applied Health Science concentration in Health Sciences Administration	2	2	0	1	0	0	5
Applied Health Science concentration in Biomedical	0	2	1	0	0	0	3
Other as it relates to question number 3	3	2	1	1	0	0	7

							Question Totals
answered question							28
skipped question							88

5. Brevard Community College welcomes any other information related to bachelor degrees you would like to provide.

Answer Options	Response Count
	34
answered question	34
skipped question	82

6. Does your company have jobs that require a minimum of a 2-year degree or certificate in any of the related fields listed? If no, please skip to question number 8.

Answer Options	Response Percent	Response Count
Hospitality Management	15.8%	3
Respiratory Therapy	15.8%	3
Occupational Therapy Assistant	21.1%	4
Physical Therapy Assistant	21.1%	4
Pharmacy Technician	21.1%	4
Advanced Manufacturing	52.6%	10
Machining	42.1%	8
Other (please specify)		20
answered question		19
skipped question		97

7. Please answer the following about the field or fields you selected.

Current positions available?

Answer Options	1-4	5-9	10-14	15-19	20 or more	Response Count
Hospitality Management	1	1	1	0	1	4
Respiratory Therapy	0	2	0	0	0	2
Occupational Therapy Assistant	1	1	0	0	0	2
Physical Therapy Assistant	1	1	0	0	0	2
Pharmacy Technician	1	1	0	0	0	2

Advanced Manufacturing	2	1	0	0	0	3
Machining	2	3	0	0	0	5
Other as it relates to question number 6	4	2	0	0	1	7

Openings anticipated yearly?

Answer Options	1-4	5-9	10-14	15-19	20 or more	Response Count
Hospitality Management	0	1	0	0	1	2
Respiratory Therapy	0	1	0	0	0	1
Occupational Therapy Assistant	1	0	0	0	0	1
Physical Therapy Assistant	1	0	0	0	0	1
Pharmacy Technician	1	0	0	0	0	1
Advanced Manufacturing	2	1	0	0	0	3
Machining	4	2	0	0	0	6
Other as it relates to question number 6	5	0	0	1	1	7

Current pool of qualified candidates?

Answer Options	Yes	No	Response Count
Hospitality Management	1	1	2
Respiratory Therapy	1	0	1
Occupational Therapy Assistant	0	1	1
Physical Therapy Assistant	0	1	1
Pharmacy Technician	1	0	1
Advanced Manufacturing	2	1	3
Machining	2	3	5
Other as it relates to question number 6	3	5	8

Average starting salary?

Answer Options	\$35,000-\$40,000	\$41,000-\$50,000	\$51,000-\$60,000	\$61,000-\$70,000	\$71,000-\$80,000	more than \$80,000	Response Count
Hospitality Management	2	1	0	0	0	0	3
Respiratory Therapy	0	1	0	0	0	0	1
Occupational Therapy Assistant	1	1	0	0	0	0	2
Physical Therapy Assistant	1	0	1	0	0	0	2
Pharmacy Technician	0	0	0	0	0	0	0
Advanced Manufacturing	2	0	0	0	0	0	2
Machining	3	2	1	0	0	0	6
Other as it relates to question number 6	4	5	0	0	0	0	9

Question Totals

answered question	24
skipped question	92

8. Brevard Community College welcomes any other information related to 2-year degrees or certificates you would like to provide.

Answer Options	Response Count
	24

							answered question	24
							skipped question	92
9. Rate the following statements as they relate to the future growth of your company.								
Answer Options	Strongly Agree	Agree	NA	Disagree	Strongly Disagree	Rating Average	Response Count	
The need for college graduates will grow in the next 5 years.	39	38	18	11	1	2.04	107	
We have difficulty finding applicants with the knowledge, expertise and educational background needed.	31	46	17	13	1	2.14	108	
Our company recruits/hires recent college graduates in the fields selected.	14	43	41	9	0	2.42	107	
In the next 3-5 years, a degree in the fields selected will be important for our hiring decisions.	20	46	37	3	1	2.24	107	
Our company would be interested in hiring graduates of Brevard Community College.	23	67	15	2	0	1.96	107	
Our company would be willing to offer internships opportunities or other mentoring relationships.	26	37	38	6	0	2.22	107	
							answered question	109
							skipped question	7

**Appendix O**  
**Letters of Support**



*Florida Institute of Technology*  
Office of the Executive Vice President  
Chief Operating Officer

October 1, 2013

Dr. Linda Miedema  
Vice President Academic Affairs  
Chief Learning Officer  
Eastern Florida State College  
1519 Clearlake Road  
Cocoa, FL 32922

RE: Addition of two Bachelor of Applied Science degrees

Dear Dr. Miedema:

Thank you so much for providing Florida Institute of Technology the opportunity to review the application to add two Bachelor of Applied Science degrees and add two areas of concentration to your existing BAS in Organizational Management. Although Florida Tech views these degrees and areas of concentration as somewhat competitive, we find no justification to oppose the application.

Please let me know if I can be of further assistance.

Sincerely,

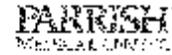
A handwritten signature in blue ink that reads "T. Dwayne McCoy".

T. Dwayne McCoy, Ph.D.  
Executive Vice President and Chief Operating Officer

cc: Dr. Dawn Miller-Kemari, Deputy Chief Operating Officer, Florida Tech  
Dr. Ed Murray, President, Independent Colleges and Universities of Florida  
Dr. James Richey, President, Brevard Community College

*High Tech with a Human Touch™*

150 West University Boulevard, Melbourne, FL 32901 6975 ■ (321) 674 8889 ■ Fax: (321) 674 7022



971 N. Washington Ave.  
Tallahassee, Florida 32309  
P: 904-299-8111  
parmednet.com

October 10, 2013

Dr. James H. Richey, President  
Eastern Florida State College  
1519 Clearlake Road  
Cocoa, FL 32922

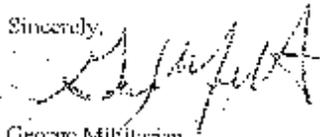
Dear Dr. Richey:

Parrish Medical Center is pleased and honored to support your proposal to offer Bachelor of Applied Science degrees in Advanced Allied Health, Information Technology and two new areas of concentration in the current Bachelor of Applied Science degree in Organizational Management.

Founded in 1958, Parrish Medical Center is a full service hospital recognized in 2012 with an "A" rating for patient safety by the Leapfrog Group and named a Health Grades Distinguished Hospital for Clinical Excellence in 2011 for the second consecutive year. As you know, having a strong cadre of employees, including those in management, are keys to any organization's success. This initiative promises to strengthen the capabilities of the Brevard County workforce for all organizations and certainly supports our constant commitment to excellence.

Convenient, affordable and high caliber opportunities to receive this type of management training, needed for individuals to advance in Brevard County and for organizations to succeed, are limited at this time. The proposed program will help to "open the doors" to access for both our employees and all residents of Brevard County and the surrounding area. I applaud you for pursuing this program.

Sincerely,



George Mikharjan  
Chief Executive Officer



# SHERIFF WAYNE IVEY

## BREVARD COUNTY SHERIFF'S OFFICE

700 S. Park Avenue ★ Titusville, Florida 32780-4095 ★ (321) 264-5201 ★ (321) 264-5360 fax ★ www.BrevardSheriff.com

**Brevard County Jail Complex**  
860 Camp Road  
Cocoa, FL 32927  
(321) 690-1500  
(321) 635-7800 fax

**Canaveral Precinct**  
111 Polk Avenue  
Cape Canaveral, FL 32920  
(321) 898-1113  
(321) 784-8940 fax

**Criminal Investigative Services**  
340 Gus Hipp Boulevard  
Rockledge, FL 32955  
(321) 633-6499  
(321) 633-8403 fax

**East Precinct**  
2575 N. Courtenay Pkwy.  
Meritt Island, FL 32953  
(321) 454-6652  
(321) 454-6631 fax

**North Precinct**  
750 S. Park Avenue  
Titusville, FL 32780  
(321) 264-5209  
(321) 264-5359 fax

**Operational Services**  
2575 N. Courtenay Pkwy.  
Meritt Island, FL 32953  
(321) 454-6643  
(321) 454-6642 fax

**South Precinct**  
1515 Sarno Road, Bldg B.  
Melbourne, FL 32935  
(321) 253-8858  
or (772) 664-1015  
(321) 253-8888 fax

**West Precinct**  
7775 Judge Fran Jamieson Way, Bldg. E  
Viera, FL 32940  
(321) 633-2123  
(321) 633-1805 fax



October 22, 2013

*Dr. James H. Richey*  
*Eastern Florida State College*  
*1519 Clearlake Road*  
*Cocoa, FL 32922*

*Dear Dr. Richey,*

*I would like to take this opportunity to provide my agency's full support of the proposed Bachelor of Applied Science degrees in Advanced Allied Health, Information Technology and two new areas of concentration (Public Safety and Sales & Marketing) in the current Bachelor of Applied Science program in Organizational Management at Eastern Florida State College (EFSC).*

*I believe that if EFSC offered a bachelor's program that is convenient and cost effective, many of our Brevard County Sheriff's Office employees would choose to pursue a degree and further develop their skills as future leaders of our agency.*

*I believe the convenience of having a local bachelor degree program in Brevard County is an incredible service for not only our agency, but our entire community, as well.*

*If I can be of any further assistance to you, please do not hesitate to call on me.*

*Sincerely,*

*Wayne Ivey*  
*Brevard County Sheriff*

*c: Chief Deputy Doug Waller*  
*Commander Mike DeMorat, Administration*

Member: Florida Sheriff's Association • National Sheriff's Association

## School Board of Brevard County

2700 Judge Fran Jamieson Way • Viera, FL 32940-6601  
Brian T. Binggeli, Ed.D., Superintendent



October 10, 2013

Dr. James H. Richey, President  
Eastern Florida State College  
1519 Clearlake Road  
Cocoa, FL 32922

Dear Dr. Richey:

Brevard County students are going to benefit from the Eastern Florida State College's (EFSC) plan to offer Bachelor of Applied Science degrees in Advanced Allied Health, Information Technology and two new areas of concentration in the current Bachelor of Applied Science degree in Organizational Management. The school district's goal is "Every student will graduate from high school prepared to enter and be successful in the workplace, in further career education, and/or in postsecondary degree opportunities." The proposed EFSC degrees align with our goal. Since dual enrollment is an option, many students will be able to complete their AS degree while still enrolled in the public schools and seamlessly enter the last two years of a Bachelor's degree at Eastern Florida State College.

Brevard Public Schools Career and Technical Education offers over 30 programs of study. The proposed bachelor programs will enhance the credentials of students who have pursued a variety of fields prior to high school graduation.

We are glad to learn of this initiative.

Sincerely,

A handwritten signature in blue ink that reads "Janice Scholz".

Janice Scholz, Director  
Career and Technical Education  
Brevard Public Schools

Janice Scholz, Director  
Office of Career & Technical Education  
Phone: (321) 633-1300, ext. 380 • FAX: (321) 635-3320



October 16, 2013

Dr. James H. Richey  
President  
Brevard Community College  
1519 Clearlake Road  
Cocoa, FL 32922

Dear Dr. Richey:

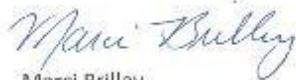
Brevard Workforce is pleased to support Eastern Florida State College's decision to pursue the addition of a Bachelor of Applied Science (BAS) in Advanced Allied Health and a BAS in Information Technology. Within the Advance Allied Health BAS there will be two areas of specialization, Health Science and Biotechnology. Within the Information Technology BAS there will be three areas of specialization, Software Development, Networking and Project Management.

Brevard Workforce administers the Workforce Investment Act programs in the county and provides employment support activities for both businesses and job seekers. Private business CEO's comprise 51% of the Brevard Workforce board. We oversee the county One Stop operations and during fiscal year 2012-2013 served 76,077 customers. Four-year degrees in Advance Allied Health and Information Technology will offer our customers and other county residents new career options.

The college is one of the most significant providers of career preparation in the county, and, definitely, the most affordable. Over the years thousands of our customers have enhanced their skills through Eastern Florida State College's programs and entered employment.

We are pleased to support your application to offer these additional four-year degree programs.

Sincerely,



Marci Brilley  
Vice President of Operations

**Titusville Career Center**  
3880 S. Washington Ave.  
Titusville, FL 32780  
504-7500 Toll Free

**Rockledge Career Center**  
235 Barnes Blvd.  
Rockledge, FL 32955  
504-7600 Toll Free

**Palm Bay Career Center**  
5275 Babcock St. NE  
Palm Bay, FL 32905  
504-7500 Toll Free

**Executive Offices**  
297 Barnes Blvd.  
Rockledge, FL 32955



Programs funded through Brevard Workforce are equal opportunity programs with auxiliary aids and services upon request to individuals with disabilities.

TTY/TDD 1-800-955-8771. Voice 1-800-955-8770

# City of Melbourne



Mayor & City Council • City Clerk's Office  
800 E. Strawbridge Avenue • Melbourne, FL 32901 • (321) 608-7220 • Fax (321) 608-7239

October 10, 2013

Dr. James H. Richey, President  
Eastern Florida State College  
1519 Clearlake Road  
Cocoa, FL 32922

Dear Dr. Richey:

On behalf of the City of Melbourne, I support the efforts of Eastern Florida State College to offer Bachelor of Applied Science degrees in Advanced Allied Health, Information Technology and two new areas of concentration within the current Bachelor of Applied Science degree in Organizational Management. Approximately 75% of the Melbourne population over the age of 25 does not have bachelor degrees. This is an excellent proposal that will increase affordable options for the residents of Melbourne to attain bachelor degrees.

The Melbourne City Council has established incentives to encourage economic development by supporting the growth of existing businesses and attracting new ones. The proposed bachelor degree programs with a focus on business, technology and health aligns with the City's goals in this effort.

Convenient and affordable opportunities to advance are limited in Brevard County. Eastern Florida State College's proposed program will both strengthen the workforce available to area industry and increase career opportunities for the residents of Melbourne and Brevard County.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen H. Meehan".

Kathleen H. Meehan  
Mayor

KHM:cw

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Dr. James H. Richey  
Eastern Florida State College  
1519 Clearlake Road  
Cocoa, FL 32922

Dear Dr. Richey:

The City of Palm Bay expresses its support of Eastern Florida State College's intent to offer Bachelor of Applied Science degrees in Advanced Allied Health, Information Technology and two new areas of specialization in Organizational Management. The City realizes that offering a strong educational foundation will provide local residents an opportunity to expand their knowledge within the city limits. Palm Bay is home to some of the most diverse neighborhoods in our county and many have not had the opportunity to advance their education. Offering a bachelor's degree locally will benefit the residents and, ultimately, the City of Palm Bay. With less than 28% of all county residents over the age of 25 possessing a bachelor's degree, new programs such as these will open the door to greater possibilities for the citizens of Brevard County.

Eastern Florida State College is the most affordable option for postsecondary education in our county. The College is part of the high-tech educational corridor with the University of Central Florida and The Florida Solar Energy Center. The addition of new advanced degree options by Eastern Florida State College will enhance the educational corridor's status in Palm Bay and in Central Florida.

The City of Palm Bay wishes only the best for Eastern Florida State College as it embarks on this new endeavor. The opportunities provided to our citizens are valuable to their overall quality of life and their pursuit of education.

Sincerely,

CITY OF PALM BAY,

  
William Caputo  
Mayor

Legislative Department

---

20 Malabar Road SE • Palm Bay, FL 32907-3009  
Phone: 321.952.3414 • Fax: 321.953.8971  
Visit our website: [www.palmbayflorida.org](http://www.palmbayflorida.org)



*Office of the President*

October 15, 2013

Dr. James H. Richey, President  
Eastern Florida State College  
1519 Clearlake Road  
Cocoa, FL 32922

Dear Dr. Richey:

Daytona State College supports the Eastern Florida State College application to offer Bachelor of Applied Science programs (BAS) in Advanced Allied Health, Information Technology and two new areas of concentration in the current BAS in Organizational Management. While Daytona State does offer some BAS programs, the distance from anywhere except the northernmost section of Brevard County can be a barrier to your service area accessing our program. Daytona State College has worked cooperatively in the past with Eastern Florida State College to meet the educational needs of our communities and will continue to do so as both colleges advance their educational opportunities.

The degrees align well with the community college mission mandated by Florida Statute to respond to "community needs for postsecondary academic education and career degree education." By offering the proposed BAS degrees, Eastern Florida State College is providing convenient and affordable access to programs that will provide upward mobility for mid-level managers currently employed. In addition, the proposed degree programs will complement current Eastern Florida State College associate degrees by providing students a means to move into management and supervisory positions.

The Eastern Florida State College application offers great promise to area residents. We look forward to the successful establishment of the proposed program.

Sincerely,

Carol W. Eaton  
President  
Daytona State College

Daytona State College  
1200 W. International Speedway Boulevard / Daytona Beach, Florida 32114  
(386) 506-3000 • [www.DaytonaState.edu](http://www.DaytonaState.edu)

