Board of Governors, State University System of Florida

Request to Offer a New Degree Program

(Please do not revise this proposal format without prior approval from Board staff)

FLORIDA ATLANTIC UNIVERSITY **University Submitting Proposal**	**FALL 2016** **Proposed Implementation Term**
Charles E. Schmidt College of Science **Name of College(s) or School(s)**	**Interdisciplinary/Interprofessional Science** **Name of Department(s)/ Division(s)**
Health Science **Academic Specialty or Field**	**BA Health Science** **Complete Name of Degree**
51.0000 **Proposed CIP Code**	

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

Date Approved by the University Board of Trustees		**President**	**Date**
Signature of Chair, Board of Trustees	**Date**	**Vice President for Academic Affairs**	**Date**

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1 in Appendix A. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2 in Appendix A. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

Implementation Timeframe	Projected Enrollment (From Table 1)		Projected Program Costs (From Table 2)				
	HC	FTE	E&G Cost per FTE	E&G Funds	Contract & Grants Funds	Auxiliary Funds	Total Cost
Year 1	160	20	$3,408				$68,162
Year 2	300	37					
Year 3	300	37					
Year 4	360	45					
Year 5	400	50	$4,491				$224,532

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal to ensure that all sections have been satisfactorily addressed. Tables 1 through 4 are to be included as Appendix A and not reproduced within the body of the proposals because this often causes errors in the automatic calculations.

INTRODUCTION

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

This proposal will provide an innovative approach to a Bachelor's degree in Health Science. This degree will consist of a core group of classes grounded in the basic natural sciences and a thread of Interprofessional education (IPE) woven throughout. The degree will include concentration areas in healthy aging studies (an FAU pillar); women's and children's health; global/environmental health; public health; clinical practice; natural science; and behavioral/mental health. Students will have access to clinical practice opportunities and other co-curricular activities (lab experiences, internships, research). Completion of the degree requires a minimum of 120 credits.

The degree will provide a broad-based interdisciplinary and interprofessional curriculum designed for students interested in pursuing a career in healthcare. The degree is composed of courses that are currently offered at FAU with the exception of three courses being developed in interprofessional education (IPE). This will enable students to take relevant coursework in various colleges and departments across Florida Atlantic University, in an effort to broaden their understanding of factors that both positively and negatively impact the health care system, patients, and practitioners. For purposes of this proposal, the terms interdisciplinary and interprofessional are different. We refer to interdisciplinary as multiple fields of study (such as biology, sociology, psychology, etc.) and interprofessional as fields of practice (such as medicine, pharmacy, social work, nursing, etc.).

Interprofessional education is defined for the purposes of this proposal program as:

> "Interprofessional Education occurs when two or more professions learn with, from, and about each other to improve collaboration of the quality of care (Centre for the Advancement of Interprofessional Education (CAIPE), 2002). CAIPE uses the term Interprofessional education (IPE) to include all such learning in academic and work-based settings before and after qualification, adopting an exclusive view of "professional"".

IPE is a competency-based concept; instilling knowledge and skill through practice by learning the roles, responsibilities, values/ethics, as well as how to communicate with a variety of professional teams. Recent accreditation requirements meant that the FAU Colleges of Nursing and Medicine had to incorporate interprofessional education into their curricula structure. In 2011-2012, FAU piloted the IPE program with faculty from the Colleges of Medicine, Nursing and Social Work. After a successful pilot program, the Office for Interprofessional Education (OIPE) was formed, supported by the Provost's Office, college deans and faculty. In five years, OIPE has provided a strong foundation in interprofessional education and collaborative practice (IPE/IPCP). While IPE exists in the graduate training of healthcare professionals such as physicians and nurses, a critical need exists for IPE to be instituted at the *undergraduate* level. FAU undergraduate students seeking a career in health care must develop the knowledge and skills necessary to collaborate with others in team-based learning settings. Incorporating IPE will provide a unique advantage to FAU undergraduate students, making this degree distinctly different from other Health Science degrees in the SUS.

Rather than working in siloes, the intent is to work together for "Interprofessional education occurs when two or more professions learn *about, from and with each other* to enable effective collaboration and improve health outcomes" ("Framework for Action on Interprofessional Education and Collaborative Practice," World Health Organization, 2010, p. 13). The expectation is that once students learn how to effectively collaborate by understanding other health care professionals' roles and responsibilities, each will enter

the workplace more competent as a collaborative member of the health science profession and to be prepared to make the health care system of higher quality and higher safety for the patients and clients served including their families and caregivers.

This degree program would provide many career opportunities for students interested in health care. According to the EAB Market Viability Report (Catalani & Mondelli, 2015), students would qualify for work in positions such as medical technologist, clinical manager, pharmaceutical sales, practice manager, and health care lobbying. In addition, students earning this degree would be excellent candidates for graduate level training in numerous areas of health care (public health, global health, physical therapy, occupational therapy, nutrition, communication disorders, as well as other graduate level health care programs).

The EAB analysis reports **high employer demand** for graduates with health science skill sets (growth of 58% statewide and 67% nationwide over the last year). Moreover, we feel that with the innovative concept of IPE will draw in a high number of students, and in turn create a high employer demand for students with this degree.

B. Please provide the date when the pre-proposal was presented to CAVP (Council of Academic Vice Presidents) Academic Program Coordination review group. Identify any concerns that the CAVP review group raised with the pre-proposed program and provide a brief narrative explaining how each of these concerns has been or is being addressed.

The pre-proposal was presented to the CAVP on December 11, 2015. CAVP did not indicate any areas of concern. However, comments were made, which are addressed below:

Comment: Can the job list be expanded to include some positions that would clearly benefit from the science background? Maybe more clinical?

Response: The science background required for this degree is at a basic introductory level upon which all study in health care should be built. Students will benefit from taking these basic science courses regardless of the career entered (of those listed in the EAB study). In addition to the careers listed, students that complete the BA in Health Science would be excellent candidates for the Accelerated Post-Baccalaureate Nursing Track at FAU, as well as an array of and science-related graduate training programs (especially with the variety of electives from which to choose within the degree).

Comment: This degree program will likely have a very large number of majors. Please keep this in mind when designing the curriculum. Will all students be expected to HAVE an IPE experience or just UNDERSTAND what the IPE experience is about? How will the sizeable number of majors be managed in the IPE context?

Response: Keeping the large number of expected majors in mind, we have structured the IPE program components and curriculum in such a way that we can provide meaningful experiences to a large number of students through team-based and problem-based learning. There will be three required IPE courses in this degree program: IPE I, a foundational level, IPE II, an intermediate level, and IPE III, an advanced level. These courses would be developed and facilitated by the OIPE at FAU. A majority (80%) of the IPE courses being proposed will be completed online through Blackboard. The coursework will be structured by OIPE through e-design work with FAU's Center for E-Learning staff. We anticipate being able to offer these classes in 8-week mini-semesters, essentially being able to offer two of each per regular fall/spring semester (A total of 6 credits per semester). Students would also have the opportunity to participate in additional co-curricular learning experiences through the Medical Internship course and Direct Independent Study. There will be opportunities for faculty and facilitators to be trained in IPE.

We have partnered with FAU's Office of Interprofessional Education as a consultant and part of the planning team and its 5-year program (2011-2016) has provided a successful foundation of an IPE program. The OIPE has already facilitated the IPE experience for 772 medical, nursing, and social works

students (approximately 230 students per year) in its 5-year existence.

Comment: The group felt the CIP chosen was accurate, HOWEVER, they caution the use of verbiage in the proposal that this degree fills STEM needs. This CIP is a HEALTH CIP…so they suggest NOT saying anything about STEM in the proposal, but call it a health area of strategic emphasis.

Response: We removed the STEM terminology in favor of "Area of strategic emphasis: Critical Workforce: health care"

Comment: There was a question about the CORE that would be used for this degree and wondered if the CORE would be the same as the Pre-Professional core. Just thrown out as something to consider. Thought if the core was similar to med school entrance, this could also be another path to med school entry.

Response: The CORE of the Health Science Degree does not encompass ALL of the required pre-requisites for medical school admission, however, medical schools do not require that students' complete degrees in specific areas of study for admission. This degree, with the addition of some electives, could very well be a major of choice for pre-medical/pre-health professional students.

C. If this is a doctoral level program, please include the external consultant's report at the end of the proposal as Appendix D. Please provide a few highlights from the report and describe ways in which the report affected the approval process at the university.

The Health Science degree is not at the Doctoral level.

D. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support (see link to the SUS Strategic Plan on the resource page for new program proposal).

The BA in Health Science aligns with the university and SUS mission to increase degree productivity and the number of degrees awarded in areas of strategic emphasis (health). This degree will increase access and degree completion for students, including students from traditionally underrepresented groups and returning adult students. This degree is designed with many options for students to engage with the local community, thereby increasing the level of community and business engagement.

OIPE has already connected with a variety of external partners. OIPE partnered with Palm Beach Atlantic University's Lloyd Gregory College of Pharmacy as well as with local hospitals to provide FAU's students with real-world cases and experiences. The OIPE consistently reaches out to FAU and its community to collaborate across borders. In 2015 the OIPE created intermediate and advanced levels of the IPE program with the College of Medicine, the College of Nursing, the School of Social Work, and health care professionals at FAU and in the community. Even before the official creation of the pilot program, IPE was a strong program element in the Christine E. Lynn College of Nursing through faculty's relationship with the University of Miami. The College of Nursing faculty, who are active participants with the OIPE Director, Associate Directors, and Provost's staff, continue leading the charge for IPE at Florida Atlantic University and its community partners. OIPE has a proven record of success that will help guide this degree program forward successfully and its meet goals of sustainability.

This degree supports the State of Florida employment initiatives by preparing students to directly enter the workforce (or graduate programs). The EAB Market Analysis reports that the there is a sharp recent increase in job postings in the last year for Health Science graduates. They found a **high employer demand** for graduates with health science skill sets (growth of 58% statewide and 67% nationwide over the last year).

Redirecting unsuccessful pre-nursing and pre-medical students into other health related careers would

enable the university to retain and graduate students in a critical need area (health), aiding the University in the spirit of the performance metrics.

Performance Indicator #4, 5 and 6: Average Time to Degree/ Four and Six-Year Graduation Rates
The proposed Health Science degree will decrease the average time to degree completion for students lingering in science and pre-nursing majors and where they have proven unsuccessful. Multiple attempts at required courses can delay graduation by more than one semester. The Health Science degree is designed with a broad based curriculum in order to utilize classes that students have previously taken; and to not require classes that are traditionally roadblocks for students interested in academic rigorous health care training such as medicine and dentistry.

Performance Indicator #15: Bachelor Degrees in Programs of Strategic Emphasis
Health constitutes an area of strategic emphasis by the Florida Board of Governors. The proposed Health Science degree will aid FAU with this performance indicator by awarding more Bachelor degrees in this critical needs area. The Health Science degree will directly address the economic development and workforce needs in health care by directly preparing students for careers in health care or after graduate level training.

Performance Indicator #16: Bachelor Degrees in STEM and Health
In 2014, *Health* was added to this performance indicator "in recognition that is an especially key component of Florida's current and future workforce." The proposed Health Science degree will aid FAU with this performance indicator by awarding more Bachelor degrees in this critical needs area.

(2025 Strategic Plan for the State University of Florida)

E. If the program is to be included in a category within the Programs of Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion.

The Programs of Strategic Emphasis Categories:

1. **Critical Workforce:**
   - **Education**
   - **Health**
   - **Gap Analysis**
2. **Economic Development:**
   - **Global Competitiveness**
3. **Science, Technology, Engineering, and Math (STEM)**

Please see the Programs of Strategic Emphasis (PSE) methodology for additional explanations on program inclusion criteria at the resource page for new program proposal.

The BA Health Science would increase the number of degrees awarded in areas of strategic emphasis, specifically *Critical Workforce: Health.* As a response to "existing, evolving and emerging critical needs" in healthcare, we propose that this degree program would increase student access and success in gaining employment in this area of strategic emphasis. Additionally, one of the performance indicators evaluates Bachelor's degrees awarded in STEM and *Health* as a percent of total Bachelor's awarded. This new degree program will aid FAU in those figures.

According to the SUS Methodology for Updating Programs of Strategic Emphasis ***(https://prod.flbog.net:4445/pls/apex/wwv_flow_file_mgr.get_file?p_security_group_id=966216073565588&p_fname=CurrentPSE-Methodology.pdf):***

> ***"Critical Needs: Health Professions*** is a category in the current version of the strategic plan based primarily upon workforce projections by The Florida Hospital Association

> and the Florida Department of Economic Opportunity. These organizations have identified the health care professions that exist as critical shortage areas in Florida…."
>
> "…In addition, there is a growing consensus that Florida will need to expand its health care workforce in all related occupations as the provisions of the Affordable Care Act are implemented and the state experiences a demographic transition as the Baby Boom Generation retires."

The EAB Market Viability report states that the there is a sharp recent increase in job postings in the last year for Health Science graduates. They found a **high employer demand** for graduates with health science skill sets (growth of 58% statewide and 67% nationwide over the last year). More specifically, Miami Dade, Broward and Palm Beach Counties were found to be in the top seven counties in Florida for Health Science professionals.

The BA Health Science will address the need for more healthcare professionals in the following ways:

1) This degree will incorporate the required pre-requisite courses for the FAU accelerated post-baccalaureate nursing program. After the fall of 2016, traditional nursing track will no longer exist at FAU and students will have 3 options to enter nursing:

A) Freshman direct admit (100 students only)
B) Accelerated Post-Baccalaureate Track (admission cap ranges)
C) RN to BSN Track

The BA Health Science degree will be a highly recommended option for students that do not qualify for freshman direct admit but may be admissible to FAU and become viable candidates for the accelerated post-baccalaureate track.

2) This degree will prepare students for graduate level training in clinical and non-clinical careers (public health, pharmaceutical sales, medical, dental, physical therapy, etc.) where expansion is necessary.

F. Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.

Florida Atlantic University, Boca Raton Campus, with the possibility that some of the courses will be offered on the partner campuses and online. We anticipate approximately 80% of the IPE courses to be offered online.

INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY

II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

The target audience is prospective students that have a general interest in health care. Current FAU students who are unsuccessful in pursuing a premedical or pre-nursing track, but are still interested in a career in health care would benefit from this degree program.

Many incoming freshmen biology majors declare an intention of attending a health professional graduate program (medical or dental school) upon graduation. A significant proportion, however, do not maintain the level of academic performance to make this a realistic goal. This degree offers an option for such students to complete their degree with an emphasis and to pursue employment or graduate studies in allied health fields. According to the EAB Market Viability Report (Catalani & Mondelli, 2015), there has

been an increase in demand regionally (58% increase state-wide) and nationally (67% increase) for health science graduates over the last year.

The admission criteria for the College of Nursing at FAU has changed. Students that are not direct admit in their freshman year will have no other options for entering the program at a later date. The proposed Health Science degree will provide a viable alternative major for these students. Redirecting these students into careers other than nursing and medicine would enable the university to retain and graduate these students in a critical need area (Critical workforce: Health care), aiding the University in the performance metrics.

Performance Indicator #4, 5 and 6: Average Time to Degree/ Four and Six-Year Graduation Rates
The new Health Science degree will decrease the average time to degree for students lingering in majors where they have proven unsuccessful. Multiple attempts at courses can delay graduation by more than one semester. The Health Science degree is designed with intentional broadness to capture classes that students have taken and to not require classes that are traditionally roadblocks for students interested in health care careers.

Performance Indicator #15: Bachelor Degrees in Programs of Strategic Emphasis
Health constitutes an area of strategic emphasis by the Florida Board of Governors. The Health Science degree will directly address the economic development and workforce needs in health care by directly preparing students for careers in health care or after graduate level training.

Performance Indicator #16: Bachelor Degrees in STEM and Health
In 2014, Health was added to this preface indicator "in recognition that is an especially key component of Florida's current and future workforce." The proposed Health Science degree will aid FAU with this performance indicator by awarding more Bachelor degrees in this critical needs area.

(2025 Strategic Plan for the State University of Florida)

B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

FAU students were surveyed in order to gauge interest in a Health Science degree. The survey sent to 4123 students (212 Pre-health, 925 psychology, 331 neuroscience, 1706 Biology, 788 exercise science, 161 pre-nursing). 300 students responded (17 not interested in health care, 283 interested in health care). Eighty-five percent of those interested in a health care career thought this degree would be a good option for them.

This degree will incorporate the required pre-requisite courses for the FAU accelerated post-baccalaureate nursing program. After the fall of 2016, traditional nursing track will no longer exist at FAU and students will have 3 options to enter nursing:

A) Freshman direct admit (100 students only)
B) Accelerated Post-Baccalaureate Track (admission cap ranges)
C) RN to BSN Track

The BA Health Science degree will be a highly recommended option for students that do not qualify for freshman direct admit but may be admissible to FAU and become viable candidates for the accelerated post-baccalaureate track.

C. If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). In Appendix C, provide data that support the need for an additional program.

The consensus of the CAVP was that similar degree programs in the SUS were large and robust, with high student enrollment. There was **no** concern by representatives from the other institutions regarding a possible impact on their enrollment in similar degree programs elsewhere.

CIP: 51.0000		headcount (term)	# of degrees (academic year)
UF	Gainesville	1036 (Fall 2013)	199 (2012-2013)
USF	Tampa	new program	none yet
UWF	Pensacola	386 (Fall 2011)	80 (2011-2012)
FGCU	Ft. Myer		36 (2014-2015)
FAMU	Tallahassee	747 (Fall 2013)	103 (2010-2011)
UNF	Jacksonville	502 (Fall 2013)	113 (2013-2014)
UCF	Orlando	3000 (Fall 2014)	none yet

D. Use Table 1 in Appendix A (1-A for undergraduate and 1-B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale underlying enrollment projections. If students within the institution are expected to change majors to enroll in the proposed program at its inception, describe the shifts from disciplines that will likely occur.

We expect that the initial shift in enrollment to this new major will be students in the "pre-nursing" or "undecided: general health" categories that were not admitted into the nursing program at FAU, with the elimination of the traditional nursing track. The other shift would come from students unsuccessfully pursuing a traditional pre-medical major. This degree program would provide a good alternative for students lingering too long in a "pre-major" they are not qualified for or are unsuccessful at completing.

Many incoming freshmen biology majors declare an intention of attending a health professional graduate program (medical or dental school) upon graduation. A significant proportion, however, do not maintain the level of academic performance to make this a realistic goal. This degree offers an option for such students to complete their degree with an emphasis and to pursue employment or graduate studies in allied health fields. According to the EAB Market Viability Report (Catalani & Mondelli, 2015), there has been an increase in demand regionally (58% increase state-wide) and nationally (67% increase) for health science graduates over the last year.

E. Indicate what steps will be taken to achieve a diverse student body in this program. If the proposed program substantially duplicates a program at FAMU or FIU, provide, (in consultation with the affected university), an analysis of how the program might have an impact upon that university's ability to attract students of races different from that which is predominant on their campus in the subject program. The university's Equal Opportunity Officer shall review this section of the proposal and then sign and date Appendix B to indicate that the analysis required by this subsection has been completed.

At the CAVP working group meeting, where this proposal was submitted (see section 1, part B of this document) **no** OCR review was requested by an institution.

We do not anticipate any issue maintaining a diverse student body in this program. The College of Science demographic is one of the most diverse at FAU. According to information provided by President John Kelly on the FAU website www.fau.edu/diversity:

"We take tremendous pride in the fact that Florida Atlantic University has long ranked as

> the most racially, ethnically and culturally diverse institution in Florida's State University System. This year, minority students make up 47 percent of our 30,000-member student body. US. News & World Report has ranked FAU the 27th most diverse university in the nation."

We expect the majority of students will be directed into this new major from two main sources:

1. Students not directly admitted into nursing but are admissible to FAU (in some other degree program).
2. Students that are unsuccessful on a pre-medical track lingering too long in other degree programs.

For comparison purposes, we selected the undergraduate programs in biology and nursing to review. We utilized the headcount and enrollment interactive reporting on the Institutional Effectiveness and Analysis (IEA) website. In fall 2015, the diversity represented in the undergraduate biology degree was as follows:

166 Asian (98 female/68 male)
482 African Americans (343 female / 139 male)
660 Hispanic (461 female / 199 male)
8 American Indian (5 female / 3 male)
89 two or more races (62 female / 27 male)
5 Native Hawaiian / Pacific Islander (4 female / 1 male)
19 unknown ethnicity (12 female / 7 male)
777 White (517 female / 260 male)

The data shows that the undergraduate degree in biology is composed of 1142 African American and Hispanic students combined, making up 51.7% of the total fall 2015 enrollment in biology. There were 1502 females enrolled in this degree program in fall 2015, comprising 68% of the total enrollment for biology. The diversity represented in this degree mirrors that of the entire university and we are confident that the proposed Health Science degree will have no issue maintaining a diverse student population.

It is not possible at this time to report the ethnicity of the student that did not get accepted into nursing as they are distributed out among many majors (or decided to attend other universities) and we are unable to identify them specifically at this point. However, we can report the ethnicity of students in the BSN nursing program for fall 2015:

8 Asian (3 female / 5 male)
38 African American (33 female / 5 male)
23 Hispanic (22 female / 1 male)
9 two or more races (7 female / 2 male)
67 white (59 female / 8 male)
5 non-resident alien (all female)

The data shows that the BSN nursing degree is comprised of 61 African American and Hispanic students, or 40% of the total population of students in the undergraduate BSN nursing degree. Again, we feel that the diversity represented in this degree mirrors that of the entire university and we are confident that the proposed Health Science degree will have no issue maintaining a diverse student population.

This degree program aligns with the University and SUS mission and their respective strategic plans to promote student success, retention and graduation rates. Academic advising for these students would take place within the College of Science from freshman to senior year. The advising they receive will be career goal oriented. There are many success initiatives at FAU and students in this degree will be directed to utilize those services if necessary.

Student Success Resources at FAU:

1. Academic Advising
2. Center for Learning and Student Success
    a. Supplemental Instruction

   b. Tutoring
   c. Learning Communities
   d. Center for Excellence in writing
3. Starfish early warning system
4. Flight plans for FTIC and transfer students
5. Academic Coaching and Career Enhancement for Students (ACCESS)
6. Career Development Center Resources
7. Counseling and Psychological Services
8. FAU Mentoring Project

In addition, the focus on Interprofessional Education will aim to teach students how to work collaboratively with providers in all fields, regardless of gender, age, race and background, for the betterment of each patient.

III. Budget

A. Use Table 2 in Appendix A to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 in Appendix A to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)

The BA Health Science degree program is based on existing course offerings in FAU's colleges (with the exception of three one-credit IPE courses being developed). We expect minimal resources to be needed, especially in the first year of implementation. We anticipate that the credit hours will be diffused across colleges, thus not necessitating additional courses. The College of Science is currently unable to shift funds. Funding for this program would come from the Provost's Office.

B. Please explain whether the university intends to operate the program through continuing education on a cost-recovery basis, seek approval for market tuition rate, or establish differentiated graduate-level tuition. Provide a rationale for doing so and a timeline for seeking Board of Governors' approval, if appropriate. Please include the expected rate of tuition that the university plans to charge for this program and use this amount when calculating cost entries in Table 2.

We will not be operating this degree on a cost recovery basis.

C. If other programs will be impacted by a reallocation of resources for the proposed program, identify the impacted programs and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

We do not expect the Health Science degree to have a major impact on other programs. Health Science students will take seats in courses offered through many colleges, however, we anticipate that the credit hours will be diffused across them with minimal impact. Students may currently be in many of these courses already, just not as a Health Science major.

D. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or

elective courses outside of the proposed major).

We do not expect the Health Science degree to have a major impact on other programs. Health Science students will take seats in courses offered through many colleges, however, we anticipate that the credit hours will be diffused across them with minimal impact. Students may currently be in many of these courses already, just not as a Health Science major.

E. Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

As the Health Science degree grows and develops, we plan to look for outside funding sources such as grants and community support.

IV. Projected Benefit of the Program to the University, Local Community, and State

Use information from Tables 1 and 2 in Appendix A, and the supporting narrative for "Need and Demand" to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

The Health Science degree will enable FAU to redirect students into health care careers other than nursing and medicine. This would support the university mission to retain and graduate these students in a timely fashion within a critical need area (health care; as indicated by the State of Florida), supporting the SUS mission to do so. As indicated in the market analysis for this degree program, "[E]mployer demand for graduates with health science skillsets increased 58 percent statewide and 67 percent nationwide over the last year." The counties in FAU's service area (Miami-Dade, Broward, and Palm Beach) rank within the top 7 counties in Florida in job postings for health science professionals.

V. Access and Articulation – Bachelor's Degrees Only

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a separate request to the Board of Governors for an exception along with notification of the program's approval. (See criteria in Board of Governors Regulation 6C-8.014)

The degree does not exceed 120 credit hours.

B. List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see link to the Common Prerequisite Manual on the resource page for new program proposal). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as "limited access."

If the proposed prerequisites are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same

proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional "track" of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

The program pre-requisites align with the approved common pre-requisites for other Health Science degree programs in the SUS.

MAC 1105
PSY X012
STAXXXX
OR- STA X023
OR- STA X014
DEP X053 (optional elective)
BSC X085/X085L
& BSC X086/X086L
& BSC X005/X005L
OR-BSC X010/X010L

C. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that Florida College System transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in Board of Governors Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

The degree will not be limited access. The criteria for admission into this major is set forth by the regular University admissions criteria.

D. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see link to the Statewide Articulation Manual on the resource page for new program proposal). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

N/A

INSTITUTIONAL READINESS

VI. Related Institutional Mission and Strength

A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan (see link to the SUS Strategic Plan on the resource page for new program proposal).

The BA in Health Science aligns with the university and SUS mission to increase degree productivity and the number of degrees awarded in areas of strategic emphasis (health). This degree will increase access and degree completion for students, including students from traditionally underrepresented groups and returning adult students. This degree is designed with many options for students to engage with the local community, thereby increasing the level of community and business engagement.

OIPE has already connected with a variety of external partners. OIPE partnered with Palm Beach Atlantic University's Lloyd Gregory College of Pharmacy as well as with local hospitals to provide FAU's students with real-world cases and experiences. The OIPE consistently reaches out to FAU and its

community to collaborate across borders. In 2015 the OIPE created intermediate and advanced levels of the IPE program with the College of Medicine, the College of Nursing, the School of Social Work, and health care professionals at FAU and in the community. Even before the official creation of the pilot program, IPE was a strong program element in the Christine E. Lynn College of Nursing through faculty's relationship with the University of Miami. The College of Nursing faculty, who are active participants with the OIPE Director, Associate Directors, and Provost's staff, continue leading the charge for IPE at Florida Atlantic University and its community partners. OIPE has a proven record of success that will help guide this degree program forward successfully and its meet goals of sustainability.

This degree supports the State of Florida employment initiatives by preparing students to directly enter the workforce (or graduate programs). The EAB Market Analysis reports that the there is a sharp recent increase in job postings in the last year for Health Science graduates. They found a **high employer demand** for graduates with health science skill sets (growth of 58% statewide and 67% nationwide over the last year).

Redirecting unsuccessful pre-nursing and pre-medical students into other health related careers would enable the university to retain and graduate students in a critical need area (health), aiding the University in the spirit of the performance metrics.

Performance Indicator #4, 5 and 6: Average Time to Degree/ Four and Six-Year Graduation Rates
The proposed Health Science degree will decrease the average time to degree completion for students lingering in science and pre-nursing majors and where they have proven unsuccessful. Multiple attempts at required courses can delay graduation by more than one semester. The Health Science degree is designed with a broad based curriculum in order to utilize classes that students have previously taken; and to not require classes that are traditionally roadblocks for students interested in academic rigorous health care training such as medicine and dentistry.

Performance Indicator #15: Bachelor Degrees in Programs of Strategic Emphasis
Health constitutes an area of strategic emphasis by the Florida Board of Governors. The proposed Health Science degree will aid FAU with this performance indicator by awarding more Bachelor degrees in this critical needs area. The Health Science degree will directly address the economic development and workforce needs in health care by directly preparing students for careers in health care or after graduate level training.

Performance Indicator #16: Bachelor Degrees in STEM and Health
In 2014, *Health* was added to this performance indicator "in recognition that is an especially key component of Florida's current and future workforce." The proposed Health Science degree will aid FAU with this performance indicator by awarding more Bachelor degrees in this critical needs area.

(2025 Strategic Plan for the State University of Florida)

B. Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

The Health Science degree provides complementary support to the neuroscience pillar and direct support for the healthy aging pillar of FAU's institutional goals and strategic actions. The Health Science degree has an emphasis area in healthy aging. One of the many areas in which the OIPE will successfully develop the degree comes through consultation. Over the past five years of the program, Senior Aging Geriatrics Education (SAGE) visits, component 2 of the FAU IPE program leadership, have been the practical educational experiences for FAU's medicine, nursing, and social work students. OIPE partnered with community organizations serving older adults in independent living facilities. Every year approximately 230 students were placed into small teams of 3-5 students. Teams were matched with a SAGE mentor in the community. The objectives of the visit: learning about successful/healthy aging, learning about the senior as a person, and learn about performing together. Students had practice taking a background history, making decisions about what types of geriatric assessment to give, and taking a

home and medicine safety assessment. Over the last 5 years, nearly every student has said that the "best part of the program was working with students from other professions and meeting and getting to know my mentor." With the OIPE program's many strengths, we hope to continue spreading this type of collaborative experience throughout the FAU community and throughout South Florida with this degree program.

C. Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology in table format of the activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.

Approximately one year ago, in consultation with prior College of Science Interim Dean Russel Ivy, we discussed the idea of a Health Science degree for "pre-medical" students that were struggling in Biology and for aspiring nursing students not admitted into the College of Nursing.

We engaged in discussions with various colleges and departments, specifically those that offer courses as a part of this degree, to garner their support and input on the design of the new degree program. We collaborated with the Director for the Office of Interprofessional Education, Jo Ann Bamdas, in an effort to incorporate IPE into this new degree.

In August 2015, EAB began a Market analysis. The Market Analysis was completed in October 2015 and the Pre-proposal form was submitted to the Provosts Office shortly thereafter. The pre-proposal was signed by Provost Perry and the Pre-proposal was forwarded to the SUS CAVP for review and feedback in December 2015.

The comments from the CAVP were received mid-December 2015 and the full proposal was completed in January 2016 and submitted for review by the College of Science Faculty Assembly as this degree is College based rather than housed in a specific department.

Planning Process

Date	Participants	Planning Activity
January 2016	Shari Goldstein, Ingrid Johanson, Evonne Rezler, Maria Thompson Llamas, Jo Ann Bamdas	Complete Proposal
January 2016	Shari Goldstein, Ingrid Johanson, Evonne Rezler, Maria Thompson Llamas, Jo Ann Bamdas	Submit proposal to Provost Office

Events Leading to Implementation

Date	Implementation Activity
February 2016	College of Science Faculty Assembly Approval
March 2016	FAU Undergraduate Programs Committee Approval
April 2016	FAU Faculty Senate Approval
May 2016	FAU BOT Approval

VII. Program Quality Indicators - Reviews and Accreditation

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations.

This is a new degree proposal that cuts across several departments and colleges. An internal supervisory committee will be established composed of faculty members that represent the departments with courses listed in this degree program and the Director of Interprofessional Education at FAU. This committee will conduct yearly reviews and make program recommendations.

VIII. Curriculum

A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor's degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

Student Learning Outcomes:
Students will acquire the following skills in this major:

CONTENT/DISCIPLINE KNOWLEDGE AND SKILLS

1. Develop/enhance understanding of the US health care system and the various employment opportunities within.
2. Develop/enhance professional behavior appropriate for health care careers.
3. Develop/enhance understanding of the various factors that shape systems (social, economic, political)
4. Develop/enhance skills, knowledge and abilities to gain employment upon completion of the Bachelor's degree or to pursue graduate level training.

COMMUNICATION SKILLS

5. Develop/enhance communication skills essential for health care professionals in all employment settings.

CRITICAL THINKING SKILLS

6. Develop/enhance collaborative skills to improve health outcomes through research, inquiry and problem solving.

B. Describe the admission standards and graduation requirements for the program.

The admission and graduation standards will mirror the general FAU admission and graduation criteria.

Baccalaureate Degree Requirements
In order to earn a baccalaureate degree in Health Science, students must:

1. Earn a minimum of 120 credits in academic courses acceptable toward the degree.
2. Earn a minimum 2.0 grade point average in the courses required for a major.
3. Earn a minimum of 45 of these 120 credits at the upper division level.
4. Earn the last 30 upper-division credits in residence at FAU.
5. Earn at least 75 percent of all upper-division credits in the major.
6. Fulfill the Intellectual Foundations Program requirements and Writing Across Curriculum (Gordon Rule) and Gordon Rule Computation Skills requirements
7. Earn a minimum of 9 credits by attending one or more summer terms at either FAU or another university in the Florida State University System.
8. Fulfill the foreign language graduation requirement.
9. Complete the Health Science Core
10. Complete 21 credits of major electives in specified concentration areas: healthy aging studies (an FAU pillar); women's and children's health; global/environmental health; public health; clinical practice; natural science; and behavioral/mental health.

C. Describe the curricular framework for the proposed program, including number of credit

hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.

This is a new degree proposal that cuts across several departments and colleges. An internal supervisory committee will be established composed of faculty members that represent the departments with courses listed in this degree program and the Director of Interprofessional Education at FAU. This committee will conduct yearly reviews and make program recommendations.

The degree will provide a core education in the basic sciences with concentration areas in healthy aging studies (an FAU pillar); women's and children's health; global/environmental health; public health; clinical practice; natural science; and behavioral/mental health. Students will have access to clinical practice opportunities and other extracurricular activities (lab experiences, internships, research). Completion of the degree requires a minimum of 120 credits.

Credit Totals:
59 credits in the major (27 upper division)
17 credits of upper division free electives
8 credits foreign language requirement
21 credits of Foundation coursework (non-overlapping with major requirements)
15 credits of free electives
Total: 120
Total upper division: 45

D. Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

	Fall		Spring		Summer	
Fr	ENC 1101	3	ENC 1102	3		
	College Algebra	3	Methods of Calculus	3		
	General Psychology	3	Foundations of Society	3		
	Intro Chemistry	3	Life Science & Lab	3		
		12		**12**		
So	Foreign Language	4	Foreign Language	4	Upper Division	2
	Foundations of Global	3	Foundations of Humanities	3	general elective	
	Intro Statistics	3	Physical Science	3		
	Chem for Health Science	3	Free elective	3	Free elective	3
	IPE I	1	Free elective	3		
		14		**16**		**5**
Jr	Foundations of Global	**3**	Foundations of Humanities	3		
	A&P I & Lab	**4**	A&P II & Lab	4		
	Bio Basis of Behavior	**3**	Major elective	3		
	Major elective	**3**	Major elective	3		
	Free elective	**1**	Upper Division general elective	3		
	IPE II	**1**				
		15		**15**		

Sr	Major elective Major elective Upper Division general elective Upper Division general elective Free elective *IPE III*	3 3 3 3 2 1 **15**	Major elective Major elective Upper Division general elective Upper Division general elective Free elective	3 3 3 3 3 **15**		

E. Provide a one- or two-sentence description of each required or elective course.

CORE COURSE DESCRIPTIONS:

General Psychology (PSY 1012) 3 credits
An appraisal of the antecedents and determinants of human behavior with special reference to individual differences, perception, learning, and personality formation.

Biological Bases of Behavior (PSB 3002) 3 credits
Prerequisite: PSY 1012
A study of the structures and functions of the neural and endocrine systems as they relate to behavior.

College Algebra (MAC 1105) 3 credits
Gordon Rule, computational
Prerequisite: MAT 1033 or MGF 1106 or MGF 1107
Linear and quadratic functions, systems of equations and inequalities, polynomial functions and equations, complex numbers, rational exponents and radicals, matrices and determinants, exponential and logarithmic functions.

Methods of Calculus (MAC 2233) 3 credits
Gordon Rule, computational
Prerequisite: MAC 1105
A descriptive and intuitive introduction to the methods and applications of differentiation and integration. Primarily for social science and business administration majors.

Introductory Statistics (STA 2023) 3 credits
Gordon Rule, computational
Prerequisite: MAC 1105 or MGF 1106 or MAC 2233
An introductory course covering descriptive statistics, probability, binomial and normal distributions, sampling distributions and hypothesis tests, and sampling procedures. Laboratory required.

Biological Principles (BSC 1010) 3 credits
Corequisite: BSC 1010L
A comprehensive treatment of biological principles, including the scientific method, evolution and natural selection, cell biology, energy transformation, reproduction, development, genetics and molecular biology.

Biological Principles Lab (BSC 1010L) 1 credit
Corequisite: BSC 1010
An introduction to general laboratory procedures to demonstrate the basic principle of biology.

Biodiversity (BSC 1011) 3 credits
Corequisite: BSC 1011L
An introduction and survey of organismal diversity, including fungi, protists, plants and animals.

Phylogenetic relationships, evolutionary mechanisms, and ecological processes are emphasized. Origins of life and human evolution.

Biodiversity Lab (BSC 1011L) 1 credit
Corequisite: BSC 1011
A survey of the diversity of eukaryotic organisms.

Life Science (BSC 1005) 2 credits
A survey of life on earth for non-majors. Evolution, anatomy, physiology, genetics, reproduction, and ecology are stressed. Lectures and discussions also demonstrate how biological knowledge is relevant to social, economic environmental and philosophical problems.

Life Science Lab (BSC 1005L) 1 credit
Pre or Corequisite: BSC 1005
Laboratory investigation of biological knowledge relevant to social, economic, environmental and philosophical problems.

Anatomy and Physiology 1 (BSC 2085) 3 credits
A study of structure and physiology from the cellular to the system levels in the human body, including integumentary, skeletal, muscular, nervous and endocrine.

Anatomy and Physiology 1 Lab (BSC 2085L) 1 credit
Laboratory investigations to augment the content of BSC 2085.

Anatomy and Physiology 2 (BSC 2086) 3 credits
A study of the structure and functions of the following systems in the human body: cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive.

Anatomy and Physiology 2 Lab (BSC 2086L) 1 credit
Laboratory investigations to augment the content of BSC 2086.

Introductory Chemistry (CHM 1025) 3 credits
Introductory readiness course in general chemistry for students with weaker but satisfactory backgrounds in high school chemistry and algebra.

General Chemistry for the Health Sciences (CHM 2032) 3 credits
Corequisite: CHM 2032L
An introduction to the fundamental concepts of chemistry: scientific measurements; atomic theory; molecules and chemical bonds; chemical reactions; aqueous solutions; salts and electrolytes; acid-base theory; radioactivity and nuclear chemistry. Orientation toward majors in the allied health fields.

General Chemistry for the Health Sciences Lab (CHM 2032L) 1 credit
Corequisite: CHM 2032
Intermediate experimental studies of chemical principles.

General Chemistry 1 (CHM 2045) 3 credits
Prerequisites or corequisites: Students must have passed CHM 1025 or are currently enrolled or previously passed one of the following: MAC 1105, MAC 1114, MAC 1140, MAC 1147, MAC 2233, MAC 2281, MAC 2311
Corequisite: CHM 2045L
An introduction to chemical principles, including atomic structure, chemical bonding, kinetics, thermodynamics and properties of the elements. A prerequisite to all other chemistry courses in science programs. This is a General Education course.

General Chemistry 1 Lab (CHM 2045L) 1 credit
Corequisite: CHM 2045

An introduction to experimental techniques in chemistry designed to demonstrate basic chemical principles. This is a General Education course.

General Chemistry 2 (CHM 2046) 3 credits
Prerequisite: CHM 2045; Corequisite: CHM 2046L
An introduction to chemical principles including atomic structure, chemical bonding, kinetics, thermodynamics and properties of the elements. A prerequisite to all other chemistry courses in science programs.

General Chemistry 2 Lab (CHM 2046L) 1 credit
Prerequisites: CHM 2045, CHM 2045L; Corequisite: CHM 2046
An introduction to experimental techniques in chemistry designed to demonstrate basic chemical principles. Qualitative analysis of selected anions and cations.

College Physics 1 (PHY 2053) 4 credits
Prerequisite: Minimum grade of "C" in one of the following: MAC 1114 or 1147 or 2233 or 2311 or 2281
The algebra- and trigonometry-based course surveys fundamental laws and phenomena of mechanics, fluids, heat, wave motion, and sound. Emphasis on understanding of physical concepts through examples drawn from the physical and life sciences. No credit for physics majors.

General Physics 1 Laboratory (PHY 2048L) 1 credit
Corequisite: PHY 2048 or PHY 2053 or PHY 2043
Experiments in mechanics, fluids, heat, wave motion and sound comprise this course. Several classes cover developing theoretical problem solving techniques.

Physical Science (PSC 2121) 3 credits
A self-contained course for non-science majors that emphasizes analytical thinking and problem solving. It covers essential concepts in astronomy, physics, chemistry, geology and meteorology.

ELECTIVE OPTIONS:

AGING STUDIES CONCENTRATION:

Human Memory (EXP 4525) 3 credits
Prerequisite: PSY 1012
This course presents psychological research and theory related to human memory. Multiple memory systems are discussed, including short-term or working memory, long-term memory, procedural memory, implicit memory, and semantic memory. Different populations of memory users are also discussed, including children, older adults, and amnesics.

Sociology of Aging and Dying (SYP 3740) 3 credits
Examination of demographic factors, cultural values and norms, institutional structures and social psychological processes relevant to death, dying and aging.

Foundations of Gerontology (NSP 4285) 3 credits
An overview of the historical, social, psychological, cultural, and economic aspects of aging with implication of aging for key current political, legal, and ethical issues.

Dynamics of Aging (NUR 4284) 3 credits
An introduction to the dynamics of aging, this course covers normal physical, psychological, and environmental changes of aging, wellness, sexuality, and communication. It includes a discussion of common health problems and the most common pharmacologic interventions associated with each.

Aesthetics of Aging (NUR 4287) 3 credits
Coming to know the beauty of aging. A consideration of aging as reflected in contemporary society through aesthetic expressions.

Promoting Health Literacy in a Diverse Older Population (NSP 4288) 3 credits
This course uses a caring approach to the assessment of health literacy and modification of provider-client interactions to improve the provision of health-related information to a diverse older population with a wide range of health literacy levels. It is open to students from other colleges at FAU.

WOMENS HEALTH CONCENTRATION:

Issues in Women's Health Care (NSP 4425) 3 credits
Traditional and non-traditional strategies in the prevention and management of common health alterations of women will be explored. Physiological and psychosocial responses to such alterations will be examined. Students will examine varying viewpoints related to contemporary issues and concerns in gynecological and reproductive health care. May be taken for credit in the Women's Studies Program.

Psychology of Women (SOP 3742) 3 credits
Prerequisite: PSY 1012
Lectures and discussions dealing with the empirical and theoretical literature related to the psychological aspects of sexual differentiation in general, and women in particular.

Culture, Gender and Health (ANT 4469) 3 credits
The course examines in a variety of cultures how sex differences and gender inequalities impact the health status of women and men, their access to health care resources and their roles as health care providers. Focused attention is paid to culturally constructed knowledge of the body, gender-based political economy of health care in developing countries, reproductive health, indigenous medical systems and children's health.

Sex, Myth, Power, and Popular Culture (WST 3305) 3 credits
Examines varying images of women of power in popular culture—film, television, song, ads—as mothers, monsters, femme fatales, amazons, witches, and goddesses. These stories and images are interpreted based on ancient myths and beliefs.

Women, Violence, Resistance (WST 3325) 3 credits
An examination of violence against women, including rape, prostitution, pornography, harassment, incest, battering, and sexual murder. Class texts and materials include political theory and analysis, first-person accounts, novels, poetry, and popular culture items.

Family Violence (SOW 4141) 3 credits
An in-depth analysis of social work and the family, with particular focus on violence within the family. Attention will be given to all areas of abuse and/or neglect, as they affect all members of the family — children, adults, and elders.

GLOBAL/ENVIRONMENTAL HEALTH CONCENTRATION:

World Geography (GEA 2000) 3 credits
Examination of contemporary world problems through geographical analysis of physical, economic, social, and political systems of major countries and world regions.

Environmental Issues in Atmospheric and Earth Science (ESC 3704) 3 credits
Investigation of the complex interactions between humans and their environment. Environmental problems encompassing selected aspects of the atmosphere, hydrosphere, biosphere, and lithosphere: including deforestation, desertification, air and water quality, and processes of land degradation.

Justice, Health, and the Environment (SYD 4513) 3 credits
Prerequisites: ENC 1101 and ENC 1102 or substitute or equivalent with grades of "C" or better
Through the lens of environmental sociology, this course examines how environmental contamination,

natural resource use, and environmental health burden are distributed unequally due to one's race/ethnicity, gender, socioeconomic status, and/or global position.

Environmental Sociology (SYD 4510) 3 credits
Prerequisites: Nine credits of coursework in Sociology at the 1000, 2000 and/or 3000 levels
Course describes a framework for understanding how the political, economic, and ideological structures of society contribute to environmental degradation.

Religions and World Politics (CPO 3761) 3 credits
This course will discuss the rise of religious movements worldwide and the impact of religious conflicts on world politics.

Global Development and Inequality of Nations (CPO 4033) 3 credits
Cross-cultural examination of political and economic development in the Third World. Students examine comparatively the evolution of state-society relations, with attention to gender relations, market forces, and public action in promoting or inhibiting development.

Global Environmental Politics and Policies (INR 4350) 3 credits
The study of global environmental politics includes a variety of issues, problems, politics and policies relevant to population growth, resource degradation and the impacts of human economic development. Examines the development of environmental governance, environmental justice movements and efforts to control consumption to enhance sustainability.

Politics of Community Development (PUP 4623) 3 credits
Prerequisite or Corequisite: POS 2041
An investigation of the issues of urban poverty, public policies designed to address poverty, and forms of mobilization by poor people in urban places.

Environment and Disease (ANT 4463) 3 credits
A study of the evolution of human diseases from ancient times to the present. The influence of culture, society and personal behavior will be explored, along with the relationship between the environment and human genetics.

PUBLIC HEALTH CONCENTRATION:

Policy Analysis (PUP 4008) 3 credits
Prerequisite or Corequisite: POS 2041
Examines analytic methods for planning and evaluating public policies, and considers alternative strategies for developing and using information in administrative agencies.

Health and Social Inequality (SYO 4404) 3 credits
Prerequisites: Nine credits of coursework in Sociology at the 1000, 2000 and/or 3000 levels
A sociological understanding of why some people live longer than others and why their quality of life may be better than others. Explanatory structures for these outcomes include socioeconomic status, race and ethnicity, and gender.

Psychology of Human Development (DEP 3053) 3 credits
Prerequisite: PSY 1012
Examines changes in behavior over the course of development and the processes underlying these changes. All major areas of child development are reviewed, including cognitive, social/personality, language, and biological, with attention to development in adolescence and adulthood.

Abnormal Psychology (CLP 4144) 3 credits
Prerequisite: PSY 1012

Understanding of so-called physical and mental illness by means of conventional and common path theories.

Drugs and Society (SYP 3550) 3 credits
This course examines drug use from both a social psychological and sociological perspective. Within the former, questions of attraction and involvement are considered. Within the latter, the control (and justification for control) of licit and illicit drugs is discussed.

Sociology of Mental Health (SYO 4410) 3 credits
This course focuses on the role of social and cultural factors in shaping, mental health. It also critically examines the social, cultural, and political meanings of mental health care, popular psychology, and various forms of psychological discourse, particularly in the United States context.

Disability and Society (EEX 2091) 3 credits
An introductory course providing life-span perspectives of disability, applicable to both non-education and education majors. Course sets background for analyzing personal, historical, political, economic, and societal perspectives of individuals with disabilities in our society.

Introduction to Health Professions (HSA 3104) 3 credits
Examinations of current and projected human resources needed for the health care system using ongoing trends and issues.

Health Care Medical Terminology (HSA 3534) 3 credits
This course develops a comprehensive understanding of medical terminology, basic disease systems, pharmacology, and the mechanism of medical coding common to health administration activities. Students are also introduced to the basic tenets of biology and biochemistry as those disciplines relate to the provision of health care.

Health Law (HSA 4423) 3 credits
Presentation of the legal responsibilities and constraints of health administration, nursing and allied health practice at all levels. Emphasis on health licensure, privileged communication, Good Samaritan legislation and malpractice.

Issues and Trends in Health Care (HSA 4113) 3 credits
Prerequisite: HSA 3111
This course presents significant health care issues and their developing trends. The course content will differ each time in order to be current with changing events of varying importance, such as inequity in , organ transplant decisions, women's and minorities' roles in health, human resource issues, etc.

Biomedical Ethics (PHI 4633) 4 credits
This course acquaints students with the philosophical treatment of biomedical concerns, primarily through analysis of attempts to resolve ethical issues arising from the practice of medicine.

Ethics (PHI 4661) 3 credits
Analysis of moral judgment and moral reasoning. Evaluation of ethical theories, with particular attention to utilitarian, Kantian and 20th-century theories. Study of the application of various ethical approaches to contemporary social problems.

Food, Nutrition, and Health (NUR 3183) 3 credits
Prerequisites: (BSC 2085 and BSC 2085L) or (BSC 2086 and BSC 2086L) or BCH 3034 with grades of "C" or better
Pre or Corequisite: CHM 2032 with grade of "C" or better
Course examines the principles of human nutrition, including nutrient characteristics, digestion, absorption, metabolism, food sources, functions, requirements and interrelationships with other nutrients, health and diseases

Perspectives in Health (HSC 3102) 3 credits
Prerequisite: Junior standing or higher and HSC 2100 with a grade of "C" or better
A study of the major health and wellness issues facing humankind. Emphasis will be placed on examining appropriate health enhancement strategies.

Health Promotion (HSC 4581) 3 credits
Prerequisite: HSC 2100 with a grade of "C" or better
A study of the fundamental concepts of health education and health promotion. Emphasis will be given to the process and practice of health promotion and the application of related health behavioral theories and models.

SCIENCE CONCENTRATION:

Psychopharmacology (PSB 4444) 3 credits
Prerequisites: PSY 1012 and PSB 3002
An introduction to the major classes of psychoactive drugs and how they affect behavior. Equal emphasis will be given to laboratory and clinical studies.

Genetics (PCB 3063) 4 credits
Prerequisites: BSC 1010, BSC 1010L, BSC 1011, BSC 1011L, CHM 2045, CHM 2045L, CHM 2046, CHM 2046L
An in-depth analysis of the mechanisms that operate in transmission genetics and an introduction to eucaryotic molecular genetics.

General Microbiology (MCB 3020) 3 credits
Prerequisites: BSC 1010, BSC 1010L, BSC 1011, BSC 1011L, CHM 2045, CHM 2045L, CHM 2046, CHM 2046L
A survey of microbiological concepts, microbial types and the use of microorganisms in medicine, agriculture and industry. Lecture.

Biochemistry 1 (BCH 3033) 3 credits
Prerequisite: 8 credits of organic chemistry
The organic chemistry of biological compounds; carbohydrates; amino acids; peptides, and proteins; nucleosides and nucleotides; nucleic acids, replication, transcription and translation; saponifiable lipids; steroids and terpenes.

Immunology (PCB 4233) 3 credits
Prerequisites: MCB 3020, 3020L, BCH 3033
The tissues, cells and biochemical components of the immune system, and the role of immune responses in the diagnosis and prevention of disease. Lecture.

Exercise Physiology (APK 4110) 3 credits
Prerequisites: BSC 2085, 2085L, 2086, 2086L, CHM 2045, 2045L, and HSC 2100 with grades of "C" or better
Corequisite: APK 4110L
A lecture course dealing with the physiological responses and adaptations to acute and chronic forms of exercise. Areas of emphasis include: energy metabolism, cardiovascular, physiology, pulmonary function, muscular system, body composition and aging.

Exercise Physiology Lab (APK 4110L) 1 credit
Prerequisites: BSC 2085, 2085L, 2086, 2086L, CHM 2045, 2045L, HSC 2100 with grades of "C" or better
Corequisite: APK 4110
The application of physiological principles toward understanding the physiological adjustments that occur to maintain homeostasis in the exercising human.

Kinesiology (PET 4330C) 4 credits
Prerequisites: BSC 2085, 2085L, 2086, 2086L with grades of "C" or better
A study of functional anatomy and elementary biomechanics. Emphasis will be placed on the analysis of

the skeletal, muscular and nervous systems and the biomechanical factors associated with efficient motor performance

Nutrition in Health and Exercise (PET 3361) 3 credits
Study of the nutritional needs of the athlete and active person. Emphasis includes: fat, carbohydrate, protein, vitamin, mineral and water needs of the active person; energy metabolism, food and fluid intake prior to, during, and after exercise; nutritional management of anemia and diabetes; nutrient needs of the young and old athlete.

Medical Anthropology (ANT 4462) 3 credits
Cross-cultural analysis of anthropological theories of health and disease. The status and role of patients and healers in human societies. Biobehavioral approach to human evolutionary adaptation to environment (e.g., belief, taboo, stress, nutrition).

General Pathophysiology (NUR 4125) 3 credits
Prerequisites: BSC 2085 and BSC 2085L or equivalent, BSC 2086 and BSC 2086L or equivalent
Study of the pathophysiology of human illness within a systems framework. Emphasis is on understanding pathophysiology as an alteration of normal subsystem physiological functioning altering health of the individual. Course concepts provide the basis for interpretation and analysis of signs and symptoms within a framework of health and disease. Selected pathophysiological nursing situation exemplars and the concepts to related conditions in diverse clients across the lifespan are presented.

CLINICAL CONCENTRATION:

Introduction to Preprofessional Studies (PCB 3083) 3 credits
Prerequisites: 8 credits general chemistry, 8 credits general biology, permission of instructor
Corequisite: PCB 3083L
To familiarize premedical or allied field students with the requirements, demands and rewards of a career in medicine. The course features lectures about a variety of medical disciplines.

Introduction to Preprofessional Studies Lab (PCB 3083L) 1 credit
Prerequisite: Permission of instructor; Corequisite: PCB 3083
Shadowing of physicians in hospital and office settings, including visits to local facilities and observations of actual medical procedures. Grading: Pass/fail option.

Premed Success (IDS 3122) 2 credits
Prerequisites: 8 credits of general biology and chemistry
Designed to help pre-health professional students (medical, dental, pharmacy, veterinary, etc.) negotiate the complex and often confusing world of medical school applications, admission tests, admission essays, interviews, financing medical school and much more. The scope of this course can be expanded to fit student needs and interests.

Basic Clinical Skills for Pre-Health Students (IDS 3125) 2 credits
Prerequisite: Minimum overall GPA of 3.0
Provides students with basic clinical skills that will ensure more meaningful medical experiences (through shadowing or volunteering) prior to entering a health-related graduate program. Students are introduced to medical professionalism and gain basic medical knowledge through training on blood borne pathogens, vital signs, CPR, H

Medical Shadowing Internship (IDS 3940) 1 credit
Prerequisites: IDS 3125 and a minimum GPA of 3.0
Designed for students interested in becoming professionals such as medical doctors, dentists, pharmacists and veterinarians. Students explore the medical field by shadowing selected health care professionals in a variety of settings and observing their daily activities, obtaining limited hands-on

experience. The scope of this course can be expanded to fit student needs and interests. May be repeated for credit for up to six semesters. IPAA, EKGs and taking patient histories.

BEHAVIORAL & MENTAL HEALTH CONCENTRATION:

Clinical Psychology (CLP 4343) 3 credits
Prerequisite: PSY 1012
Provides an understanding of the practice of modern clinical psychology. Students will be able to understand the theory and application of evidence-based practice in clinical psychology, including assessment, treatment, forensic settings, health care applications and organizational consulting.

Neuropsychology (PSB 4240) 3 credits
Prerequisites: PSY 1012 and PSB 3002
Explores the fundamentals of human neuropsychology, including the effects of brain damage on memory, language and spatial behavior, development and recovery of function.

Psychology and the Law (SOP 4751) 3 credits
Prerequisite: PSY 1012
Course helps students understand the modern applications of psychology to civil and criminal competencies, torts and personal injury, investigation and interviewing, the insanity defense, criminal classification, juvenile and family law, sexual deviance and violent behavior, offender profiling, dangerousness prediction, trial testimony, jury psychology and the role of the psychologist as expert witness.

Abnormal Psychology (CLP 4144) 3 credits
Prerequisite: PSY 1012
Understanding of so-called physical and mental illness by means of conventional and common path theories.

Career and Lifespan Development (SDS 3340) 3 credits
This course addresses the history, trends and future direction of the world of work. It focuses on career development theories, searching and exploring job and career opportunities, self-assessment, and being successful in the job market. Attention is also given to issues in the workplace, such as diversity and strategies for advancement.

Interpersonal Communication Skills (SDS 4410) 3 credits
This course addresses the nature and process of interpersonal communication. It focuses on perceptions, self-disclosure, stages of relationships, spoken and unspoken communication, listening and responding strategies and problem-solving skills. Attention is given to understanding cultural diversity, conflict management and communication via electronic means.

F. For degree programs in the science and technology disciplines, discuss how industry-driven competencies were identified and incorporated into the curriculum and indicate whether any industry advisory council exists to provide input for curriculum development and student assessment.

This is a new degree proposal that cuts across several departments and colleges. An internal supervisory committee will be established composed of faculty members that represent the various departments with courses listed in this degree program, including the Director of the Office of Interprofessional Education. The Director of the OIPE (along with its Associate Directors from the Colleges of Medicine, Nursing, and Social Work and IPE competency-committee members) developed the program into the success that it is today. These members would provide expertise from proven methods of best practice and learning from the challenges which would benefit the program and the overall university community. This committee will conduct yearly reviews and make program recommendations.

As the Health Science Degree grows and develops, we will seek out a professional industry Advisory Board. Some components of the program already have one (ex: Office of Interprofessional Education). OIPE has a successful model and can be an excellent resource for how to develop an effective and efficient Advisory Board. Industry-driven competencies were identified by the EAB Market Analysis report (competencies: communication, sales and personnel management). The competencies are incorporated into the Health Science degree through the Interprofessional Education component, the health administration electives, and the opportunity for students to gain real-world experiences through a variety of courses offered as electives in the degree (e.g.: Medical Internship, Introduction to Pre-Professional Studies and Lab).

G. For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate.

There are no specialized accreditation agencies that would be concerned with the BA Health Science.

H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why?

N/A

I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 2 in Appendix A. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.

The majority of the courses are delivered traditionally on the main Boca Raton campus, with the possibility of some courses being offered at branch partner campuses and online.

IX. Faculty Participation

A. Use Table 4 in Appendix A to identify existing and anticipated full-time (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).

We anticipate the need for administrators and faculty to facilitate IPE1, IPE2, and IPE 3 courses.

B. Use Table 2 in Appendix A to display the costs and associated funding resources for existing and anticipated full-time faculty (as identified in Table 2 in Appendix A). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

The degree is composed of courses that are currently offered at FAU with the exception of three, three-

credit courses (IPE 1: Foundation; IPE2: Intermediate IPE; and IPE3: Advanced) being developed by the Director of the Office of Interprofessional Education (OIPE) with the Center for E-Learning to assist students with IPE communication and teamwork competencies.

The proposed degree incorporates courses taught in a variety of disciplines across the university (from Science; Arts and Letters; Business; Education; Nursing; and Design and Social Inquiry). We do not expect the need for significant resources, especially in the first two years. Should this degree program attract more students than expected, we anticipate that the credit hours will be diffused across colleges. FAU will have to commit additional resources to augment advising personnel and Office of Interprofessional Education faculty and staff.

The projected costs for the Health Science degree in Year One include 0.5 faculty appointment to teach the Interprofessional Education courses to be performed by Jo Ann Bamdas (OIPE Director). The projected headcount indicates a need for a 0.33 A&P Academic Advisor appointment in order to keep advising ratios at 300:1 (the University standard). The Year One total is projected at $68162.

By year five we anticipate the need for 1.5 faculty appointment to teach the Interprofessional Education courses and 1.33 Academic Advisor appointments for a total of $224,562.

C. Provide in the appendices the abbreviated curriculum vitae (CV) for each existing faculty member (do not include information for visiting or adjunct faculty).

This degree is composed of courses that exist in current majors at FAU. The responsibility for vetting faculty, productivity, research, and service will remain with the respective colleges and departments. All of the faculty currently meet SACS standards. All of the academic programs and departments at FAU have met the productivity metrics established by the Board of Governors.

D. Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.

This degree is composed of courses that exist in current majors at FAU. The responsibility for vetting, faculty, productivity, research, and service will remain with their respective colleges and departments. All of the faculty currently meet SACS standards. All of the academic programs and departments at FAU have met the productivity metrics established by the Board of Governors.

X. Non-Faculty Resources

A. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved.

The BA Health Science degree builds on existing FAU disciplines. Existing library resources are sufficient to meet the needs of the degree.

B. Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3 in Appendix A. Please include the signature of the Library Director in Appendix B.

Existing library resources are sufficient to meet the needs of this degree.

C. Describe classroom, teaching laboratory, research laboratory, office, and other types of

space that are necessary and currently available to implement the proposed program through Year 5.

Office space would be required for the new advisors. A plan has been proposed to Dr. Blanks (Interim Dean) for the acquisition of more office space adjacent to the Science Advising Services Office.

D. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2 in Appendix A. Do not include costs for new construction because that information should be provided in response to X (E) below.

We do not anticipate the need for additional space other than office space for new advisors.

E. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 in Appendix A includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

New capital expenditure is not necessary for this degree program.

F. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.

We do not anticipate the need for specialized equipment for this degree program. Existing equipment will suffice.

G. Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2 in Appendix A.

We do not anticipate the need for any additional specialized equipment for this degree program. Existing equipment will suffice.

H. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2 in Appendix A.

We do not anticipate the need for additional special categories of resources to implement the program through year 5.

I. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2 in Appendix A.

As the program grows and develops, we plan to seek out possible scholarships for Health Science students.

J. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

There are existing opportunities for internships and practicum experiences of which health science students will be able to take advantage. Internship opportunities exist also with the Career Development Office. There are over 200 providers currently affiliated with FAU's Medical Internship course and

Introduction to Pre-Professional Studies and Lab. Students taking these courses observe a variety of providers in myriad settings. In addition, the Office of Interprofessional Education works with community partners to engage students in real-world environments. For example, in five years OIPE collaborations grew inside FAU and outside. OIPE has reached across our own university to create possible collaborations such as with the Green Memory & Wellness Center and the Diabetes Research and Education Center. On the outside OIPE formed relationships with the Norman and Ruth Rales Jewish Foundation, Caridad, Inc., and to other universities to build initiatives and seek out locations for practical experiences with which to place our students.

APPENDIX B

Please include the signature of the Equal Opportunity Officer and the Library Director.

Signature of Equal Opportunity Officer	**Date**
Signature of Library Director	**Date**

This appendix was created to facilitate the collection of signatures in support of the proposal. Signatures in this section illustrate that the Equal Opportunity Officer has reviewed section II.E of the proposal and the Library Director has reviewed sections X.A and X.B.