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# ACADEMIC PLANNING COMMITTEE RECOMMENDATION

## SR-10-11-18 APC

Recommends that the Marshall University College of Health Professions' Intent to Plan for a BS in Health Sciences be approved.

## **RATIONALE:**

The Academic Planning Committee reviewed the Health Sciences Intent to Plan and voted to approve.

## **FACULTY SENATE CHAIR:**

APPROVED BY THE	2//
FACULTY SENATE Am Mammel	DATE: 4/1/
DISAPPROVED BY THE	
FACULTY SENATE:	DATE:
UNIVERSITY PRESIDENT	
APPROVED:	DATE: <u> 3//6///</u>
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DISAPPROVED:	DATE:
COMMENTS:	
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## **Executive Summary**

Name of Institution:

Marshall University

Date:

March 12, 2010

Category of Action Required:

Initial Approval

Title of Degree:

Bachelor of Science in Health Sciences

Location:

Huntington

**Effective Date to Proposed Action:** 

Fall 2011

**Brief Summary Statement:** 

Bachelor of Science in Health Sciences Marshall University College of Health Professions

Marshall University's (MU) College of Health Professions (COHP) is requesting approval to develop a baccalaureate degree in Health Sciences (BHS). This program will offer the first baccalaureate in health sciences degree by any school in West Virginia (WV). The only remaining option for WV students for completion of a BSH that do not wish to relocate would be an online program of study; often at greater cost than traditional on-campus programs.

Nearly all health professions are experiencing a great demand for highly trained professionals but a shortage of graduates from qualified programs to fill the open positions. Yet, COHP has many qualified applicants competing for few open slots in professional programs. Meanwhile, health issues in WV continue to escalate with WV often leading the nation in poor health. For example, WV ranks second in percent of population with diabetes, fourth for overall obesity, and ranks in the top ten for smoking, sedentary life-styles, poor mental and physical health days, occupational deaths, air pollution, and preventable hospitalizations.

Holders of a bachelor of health sciences degree are positioned to pursue additional education that could lead to careers like nursing, medical assistant and more. With appropriate advising and successful completion of course work, they may also be eligible to compete for admissions into degree professional programs or programs at the graduate level in health fields such as physical therapy, pharmacy, occupational therapy, public health, health informatics, speech-language pathology, health administration, or medicine. Students enrolled in a bachelor of health sciences degree program can expect to take courses such as mathematics, anatomy, first aid, medical record keeping, chemistry, and medical ethics. Students graduating with the Bachelor in Health Sciences may choose to pursue non-clinical occupations within the health care sector including children's care manager, claims reviewer, client advocate, community relations manager, independent living specialist, insurance sales, lobbyist for health care, pharmaceutical sales, wellness coordinator, or medical equipment marketing and sales.

The mission of the BSH is to provide a strong foundation in the health and human sciences for students intending to pursue graduate studies in professional health science programs. The combined program components in basic science and health science will enable students to become effective and productive health professionals who value the diversity of the various communities in which they work and serve.

The proposed MU BSH program will consist of a minimum of 121 credit hours obtained over a four year period. The length of time to completion of the degree will be largely dependent upon the route of

entry, but the program is designed so that students can complete the degree in four years from freshman status.

To facilitate progress through this 121 credit degree program and to ensure sufficient students to meet the program objectives, three entry points will be developed:

- 1. Students may enter MU at the freshman level as pre-health students with an emphasis on health sciences or as a transfer from other MU majors.
- 2. Students may transfer into MU from another institution. Transfer students must meet the MU transfer requirements in relationship to the new CORE curriculum.
- 3. Students may enter the program as post-baccalaureate from any degree and complete the required health sciences curriculum.

#### PART I: PROGRAM DESCRIPTION

The College of Health Professions is proposing a baccalaureate degree in health sciences (BSH) as a stand-alone program housed within the COHP. The program's mission is to provide a strong foundation in the health and human sciences for students intending to pursue graduate studies in professional health science programs. The combined program components in basic science and health science will enable students to become effective and productive health professionals who value the diversity of the various communities in which they work and serve.

The program provides an educational model that will allow students to move through the foundational courses and on to a more focused curriculum compatible with health sciences related employment or to progress to graduate programs in health professions. It will therefore provide basic preparation for health professional students and increase the availability of health professionals at a time of critical health care shortages and distribution of workforce issues both nationally and state-wide.

The program objectives are listed below:

#### A. Program Objectives

Our objectives are to educate, train, and prepare the students in health sciences who will:

- 1. Proceed into health professional fields of study or pursue graduate education in a health profession.
- 2. Demonstrate sound, independent and evidenced-based decisions utilizing information literacy, critical thinking skills, and empirical data.
- 3. Serve as agents of change where appropriate and possible to improve patient outcomes through public health policies.
- 4. Adhere to the core professional values associated with the profession.
- 5. Adhere to all established ethical and legal guidelines for practice and research
- 6. Provide culturally sensitive care distinguished by advocacy, trust, respect, and an appreciation for individual differences.

- 7. Possess basic and applied research skills characterized by discovery and dissemination of new knowledge.
- 8. Possess the research skills necessary to track patterns of health and disease within a population.
- 9. Demonstrate a commitment to the health of the community through participation in primary and secondary prevention program education.
- 10. Commit to improving the quality of life of those we serve.

## B. Program Identification

The following is the appropriate program identification as provided in the Classifications of Instructional Programs developed and published by the U.S. Department of Education Center for Educational Statistics: (currently no identification exists for undergraduate public health)

51.000 Health Services/Allied Health/Health Sciences, General. (NEW) A general, introductory, undifferentiated, or joint program in health services occupations that prepares individuals for either entry into specialized training programs or for a variety of concentrations in the allied health area. Includes instruction in the basic sciences, research and clinical procedures, and aspects of the subject matter related to various health occupations.

### C. Program Features

The BSH program will offer the first ever such program in the State of West Virginia provided by a public or private institution. The degree will consist of 121 undergraduate credit hours over a three to four year period (three year option includes summer semesters). Students may enter the program in three ways: (1) direct admit as freshman level progressing through all levels of coursework and required hours; (2) post-baccalaureate degree from any university; (3) transfer from accredited university. All students regardless of entry point must meet the MU requirements for graduation including satisfaction of the new CORE requirements.

Students entering the program through non-traditional routes of acceptance such as post-baccalaureate will be required to complete the health sciences core courses and meet the MU requirements for graduation and granting of degree. Transfer students will be evaluated for level of acceptance depending upon coursework completed and will need to meet MU requirements for graduation.

#### Admission and Performance Standards

Prospective students who wish to apply to for admission to the BSH program must meet the general admission requirements for MU admissions. Applicants to the BSH program are admitted based on overall cumulative GPA and ACT scores.

#### Admission Criteria

Prospective students must meet the minimum criteria listed below to be considered for admission to the program.

#### **Direct Freshman Admission**

For students applying for freshman admission, minimum qualifications include:

- A high school diploma (official transcript with graduation date and a grade of C or better required).
- An Overall Grade Point Average of at least 2.5 and a composite score of at least 19 on the ACT or a combined score (critical reading + math) of at least 910 on the SAT.
- Completion of the 2008 Higher Education Policy Commission (HEPC) course requirements. 2008 HEPC course requirements include:
  - 4 years of English (including courses in grammar, composition, literature)
  - 3 years of social studies (including U.S. history)
  - 4 years of math (including Algebra I and at least two higher units)
  - 3 years of science (all units must be laboratory science)
  - 2 years of the same foreign language
  - 1 year of fine arts

## Post-Baccalaureate Degree

For students applying undergraduate credits, minimum qualifications include

- Unconditional admission to Marshall University.
- Earned a baccalaureate degree with a minimum 2.5 GPA overall.

#### Transfer Student

- All transfer students must be eligible to return to the institution they most recently attended.
- Must meet all CORE curriculum requirements based on number of hours transferred into Marshall University (see current student handbook)
- In addition, transfer students who have fewer than 26 earned credit hours must meet one of the following criteria:
  - Must meet the freshman admission standards of a 2.5 cumulative high school GPA and a composite score of 19 on the ACT or 910 on the SAT (CR+M) OR
    - Have earned 12 college credit hours and completed all required developmental courses while maintaining a 2.5 cumulative college GPA

#### D. Program Outcomes

The following outcome measures have been established for the BSH program

- 1. Eighty-five percent or more of all students admitted will successfully complete the program within four years.
- 2. Within six months of successful completion of the BSH, 90% of graduates will be employed in a health related field or admitted to a graduate health professions program.

#### E. Program Delivery

All didactic coursework will be offered on the Huntington campus. All clinical experiences and practicum will be completed at local, regional, or state public health care facilities, or private facilities that provide public health to populations. Each clinical practicum will accommodate the students' focus of interest where possible.

#### PART II: PROGRAM NEED AND JUSTIFICATION

#### A. Relationship to Institutional Goals/Objectives

The addition of this health professions program would be beneficial to the citizens of West Virginia and surrounding Appalachia region by providing students interested in health related fields to gain the basic foundational education required to enter into graduate level health programs or to enter the health field at the entry level position. Provision of additional students in the health professions will increase access to services and improved health services in WV, the region, and the nation. This program is consistent with Marshall University's current mission and areas of emphasis. The University has demonstrated a commitment to improving the education, health, and welfare of WV through innovative and necessary programs of study.

The mission of the university, adopted by Marshall University's President in his strategic plan "Owning the Opportunity, MU-2010", confirms the university's commitment to excellence in a broad range of disciplines and professional fields. "Marshall University will continue to serve the needs of the state and the region, and move toward increased national prominence by fostering academic excellence through strong academic programs... [and] will develop new programs that provide unique opportunities for advanced study in fields important to Marshall University and to the vitality of the region, state, and nation." Thus, the mission of the BSH is entirely compatible with the larger mission and purposes of the College of Health profession and the University as a whole.

#### B. Existing Programs

There are no programs that offer a BSH in WV. Students in WV with an interest in undergraduate health sciences must travel out of state to seek their education at greater expense, or take course online. Currently, the nearest program offering a baccalaureate in health sciences is located in Pennsylvania. Attending school so far from home would necessitate a student relocating and add living expenses to the cost of education. Successful implementation of the BSH at MU could be the first step in creating a program of public health that would make education available and affordable for the majority of WV students.

The suggested tuition for MU's BSH program would be based on the standard MU undergraduate tuition. Additional costs would be incurred for required summer practicum courses at the current hourly rate charged by MU. For students taking full 12 credit hours in the summer, full time tuition rates would prevail.

Table 1 Comparison of Bachelor of Science in Health Science Programs

College/State	Tuition AY			
	Resident	Non resident		
Thomas Edison State College	\$2,892	\$5,392		
Stony Brook University	\$4,987	\$13,380		
University of Florida	\$5,020	\$25,020		
Marshall University Proposed Tuition	\$5,284	\$12,896		
Idaho State University	\$5,417	\$15,916		
University of Missouri	\$5,880	\$9,612		
Northern University of Kentucky	\$7,128	\$13,896		
University of Minnesota	\$11,976	\$11,976		
Penn College of Technology	\$13,080	\$16,380		
Medical University of South Carolina	\$14,280	\$20,580		
Drake University	\$26,400	\$26,400		

## C. Program Planning and Development

Marshall University has a long and successful history of granting undergraduate level degrees. MU confers a wide range of BS degrees in a variety of fields. Each has been successful at gaining national certification where available. As the number of undergraduate health science programs grow, professional accreditation is certain to follow. Consistent with the other MU undergraduate and professional programs, the BSH will seek accreditation from a national body when and if one becomes available. Meanwhile, the program will be covered under the University accreditation. In keeping with general accreditation standards, the mission, standards, and curriculum of the BSH program will be rigorous and provide students with the educational tools necessary to be successful health professionals.

#### D. Clientele and Need

The COHP enjoys a growing base of applicants to all current programs and has plans to add additional programs as necessary to meet the demand for health professionals. COHP is currently working towards creation of a Doctorate of Physical Therapy program and MU is exploring the creation of a school of pharmacy and a master of science in public health degree. Additional graduate level programs will be forth coming. Marshall has already seen an increase in the number of students admitted with physical therapy as their planned major and additional graduate or doctoral level program offerings will no doubt provide another increase in student admission. These students do not wish to obtain one of COHP's current undergraduate health majors but are focused on graduate programs that have vastly different curricular admissions requirements than the current

undergraduate health programs provide. Thus, many prospective students do not seek admissions to MU.

COHP currently has over 2,100 students enrolled in the college, but many have not committed to a major. Each year the number of students undecided on a health profession major increases. Currently, more than 700 students are admitted to COHP but not committed to any major. While many have their ultimate graduate degree in mind, some of these students know they wish to be involved in a health field, but are not certain at this tender age exactly which health profession they are most interested in. Unfortunately, at MU COHP there are too few options for those students interested in health fields but not specifically in those fields currently available at MU at the BS level. Additionally, COHP has no general health science undergraduate degree that will prepare students for admissions into the various graduate health professions programs. Many of these students decide after their freshman year to leave MU for other opportunities not currently available in the MU program offerings. The addition of a BSH program would provide additional options for existing students to choose from and draw even greater numbers of applicants to MU COHP.

WV suffers from a disparate number of citizens with chronic health problems. It is consistently among the top five states in terms of obesity, sedentary lifestyles, heart disease, and diabetes among other chronic and acute diseases. In addition, WV is the second most rural state in the US and has one of the oldest populations, factors which will only secure this unfortunate positioning for WV for decades to come. Yet, WV lacks access to health professionals related to a dearth of locally trained individuals and difficulty recruiting into this area. Preparing students at the undergraduate level for challenging and rewarding health professions careers would help to alleviate concerns over access to health professionals by increasing the pool of trained applicants readily available in the local market.

#### E. Employment Opportunities

Graduates of a health sciences bachelor's degree program will be prepared to pursue a variety of health care professions. While each professional degree program has different requirements, students will be well grounded in the sciences necessary to pursue education for health professions such as medical lab assistant, histotechnologist, radiology technician, dental hygienist, physical therapy, pharmacy, medicine, and more. Some graduates may pursue careers in the administrative aspect of health care, with careers like medical records clerk, insurance coder, or hospital administrator. Additionally, graduates, through appropriate advising, will be prepared to complete for admissions into graduate doctoral level health profession schools programs.

#### F. Program Impact

Although attempts have been made to recruit health professionals into rural areas of WV, little progress has been realized. Rural areas, especially in Southern WV continue to have a dearth of providers. Many have to travel miles to find medical professionals. Successful recruitment from rural areas of Southern WV will no doubt add to the dearth of professionals available within smaller communities as many of these students are known to return to their home to establish a practice.

The BSH program will provide an opportunity for citizens of WV and surrounding states to procure an education in a secure field. This will provide MU positive linkages to the community and state and lay foundations for scholarly activities related to health care.

#### G. Cooperative Agreements

Existing affiliation agreements with Marshall University's College of Health Professions and every large provider of health care in the region already exists. If additional sites are necessary for practicums, obtaining such contracts will not be problematic.

COHP has an excellent working relationship with the Cabell County Health Department (CCHD) and Dr. Tweel, medical director CCHD. The health department would be an ideal partner for health initiatives.

#### H. Alternatives to Program Development

Students wishing to pursue a baccalaureate degree in health sciences must leave the area at considerable cost, or resort to online programs. There are no West Virginia university's offering the BSH degree program. MU needs to capitalize on this opportunity and through program development, accelerate the positive influence on our current health care problems through additional well-educated health professionals in WV.

## PART III: PROGRAM IMPLEMENTATION AND PROJECTED RESOURCE REQUIREMENTS

#### A. Program Administration

Program administration will be accomplished by the Dean, COHP and the department Chair. The Chair will organize, administer, review, develop and assure program effectiveness through on-going program assessment. This person will participate in the budget process through the COHP dean's office and be responsible for a leadership role in the continued development of the program. It is expected that the Chair will maintain current knowledge of the professional discipline and educational methodologies.

The proposed organizational chart for Marshall University's College of Health Professions illustrates the relationship between all departments, divisions, and schools for Education and Marshall University. Further delineation of the organizational structure within Marshall University's College of Health Professions can be noted in the organization charts in Appendix A.

### **B.** Program Projections

Initial enrollment is presently projected for 40 students per class. For consistency, this plan assumes 30 resident students each year and increases non-resident from 10 year one to 20 for each year thereafter for a total of 50 students admitted annually beginning year two. This is a conservative estimate based on the infancy of this program and actual enrollment may be higher. Health professions are a time intensive discipline particularly in the field practicum in the fourth year.

Growth of the program will be determined by classroom size and faculty to student ratios. Table 3 displays the projected enrollment for five years.

Table 3: Projected student numbers by year

students: 1st year	40	50	50	50	50
students: 2nd year		37	45	45	45
students: 3rd year			37	45	45
students: 4th year			-	37	45
Totals	40	87	132	177	185

#### C. Faculty Instructional Requirements

COHP will be responsible for faculty resources and benefits upon implementation of a BSPH program. All faculty will be required to hold a professional degree appropriate for the subject material taught. The development of a health science degree will require 14 hours of additional coursework and field/clinical experiences currently not available at MU (refer to table 4). Students will start taking their health science courses in the junior year. This program will utilize existing courses where possible

During the first year of the program, only one faculty member would be needed, the director/department chair. The director will oversee development of the curriculum and assist in hiring additional faculty. The director will teach in the initial course offerings during year three of the program. One additional faculty would be hired during the third year of the program for a total of two faculty. Additional part time faculty may be necessary for field observations and clinical rotations. Additional clinical and associate faculty may be required depending on program growth.

Table 4: Total Credits per Semester for BSPH

Year	Fall	Spring	Total	Total New BSH credits
1	16 cr.	16 cr.	32 cr.	0 cr.
2	15 cr.	17 cr.	32 cr.	0 cr.
3	16 cr.	15 cr.	31 cr.	4 cr.
4	13 cr.	13 cr.	26 cr.	10 cr.
Total Course	Credits		121 cr.	14 cr.

#### D. Library Resources and Instructional Materials

Library resources currently offered at MU are sufficient. Students in the BSH program will have access to all MU library resources normally afforded students. No new or additional library resources will be necessary at this time. Additional library needs will be assessed by the program director on an annual basis.

#### E. Support Service Requirements

All support service requirements will be jointly determined by the director of the health professions program and the dean, COHP. One support staff will be required to support the faculty and to maintain clinical records. The office of student services will assume responsibility for recruitment for this program and standard duties as performed for all COHP departments.

## F. Facilities Requirements

MU will be responsible for all facilities necessary to operate and maintain the BSH program. COHP is currently housed in Prichard Hall and occupies the entire third and fourth floors and one half of the second floor. Additional faculty office space will be necessary for the Chair and newly hired faculty in the BSH program. There are currently no offices in Prichard Hall available to COHP; therefore, appropriate space would have to be located. Ideally, faculty for the BSH would be housed in Prichard Hall with other college departments.

#### G. Operating Resource Requirements

Faculty, personnel and facility resources are the responsibility of MU and COHP. Space suitable for faculty and one staff would be required for this program. Classrooms that are suitable for 50 or more students would be necessary. We believe that suitable classrooms exist on campus and with creative scheduling can accommodate the needs of the BSH program.

#### H. Source of Operating Resources

Faculty, personnel and facility resources are the responsibility of MU. Operational funds will be derived from tuition and fees. The total costs of operations for the program started with a base level estimated based on the average costs per departments currently in COHP. Costs associated with a start up program are likely to be higher related to specialized needs, therefore 25% additional operating expenses were added to the proposed budget. The program chair will be able to assist with refining the budget.

#### PART IV: OFFERING EXISTING PROGRAMS AT NEW LOCATIONS

Not Applicable

#### **PART V: PROGRAM EVALUATION**

#### A. Evaluation Procedures

Evaluation is a critical component to maintaining effective programs. Marshall University has a systematic and on-going evaluation process. All departments must submit an annual evaluation and program evaluation through the Office of Program Review and Assessment.

Faculty will be employed through COHP which conducts annual evaluations. Faculty of the BSH program are considered Marshall University faculty. All courses will be developed utilizing national criteria suitable to the subject material and will be submitted through the appropriate committees for approval by the COHP and Marshall University. A proposed course structure can be found in Appendix C.

Student satisfaction with and effectiveness of the didactic component of the program will be assessed in a variety of ways. Each semester, students will complete computer-scored anonymous surveys for all courses in which they are enrolled. The Office of Institutional Research will compile survey results and disseminate to the dean and chair.

Students will also be provided the opportunity to evaluate and comment on their clinical education. Evaluations for individual clinical sites and clinical instructors employed by the sites are submitted at the end of each semester for all clinical sites visited during the term.

Alumni surveys will be sent to graduates within 6 months of graduation requesting feedback with professional development and program satisfaction. Employer surveys are sent to students employed within the field after six months in order to evaluate the effectiveness of the program's graduates as public health workers. The total number of students enrolling in graduate programs will also be assessed.

Throughout the program, a variety of measures will be employed to assess student learning and comprehension. Among the measures utilized in the classroom setting include, but are not limited to, written objectives and examinations. In the clinical setting, student competence will be formally evaluated by the faculty throughout the entire practicum experience.

Another common practice of measuring competence is through student GPA. The program policies state that a student must maintain a GPA of 2.5 throughout the program. If a student's GPA falls below a 2.5, they will be placed on academic probation and have one semester to bring it to an acceptable level or be dismissed from the program.

The Graduate Survey is a common method utilized to measure preparedness for practice as a public health worker. Students who complete the entry level program at MU and obtain employment in the field will be surveyed within six months for feedback on the program's effectiveness in preparing them for practice.

Students/Graduates of the program will be asked to submit the name of their employer upon securing professional employment. Employer information will be requested from students after six months of employment. The Employer Survey solicits information on their ability to perform in their current capacity. This provides additional feedback to enhance program content.

#### B. Accreditation Status

There is currently no regional or national certification program for the bachelor level degree in health professions. BSH programs that are associated with a university are usually accredited under the umbrella of accreditation for the university.

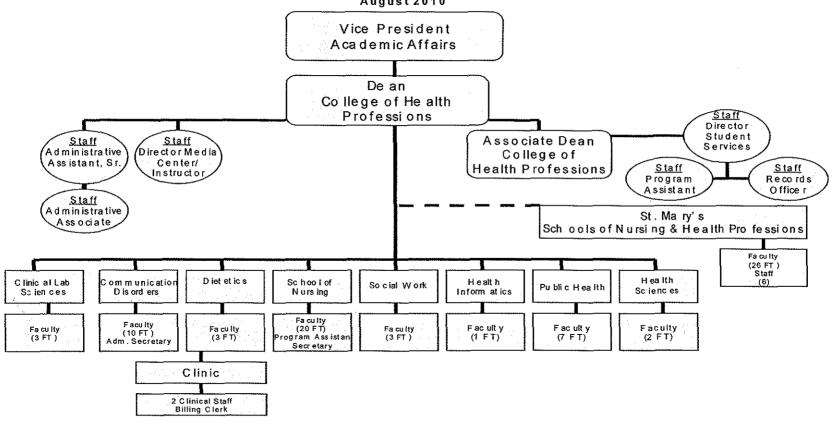
## **Termination of Program**

All program termination procedures will be guided by MU policies on program termination located in the undergraduate student handbook and MU's Greenbook. Any decision to terminate this program would require that sufficient coursework be taught to complete the degree for all accepted students, or arrangements be made with another institution offering a like degree to accept all students enrolled.

## APPENDIX A

MARSHALL UNIVERSITY COLLEGE OF HEALTH PROFESSIONS PROPOSED ORGANIZATIONAL CHART

## Marsh all Un iversi ty Co llege of Heal th Professions Organization al Chart August 2010



## APPENDIX B

Marshall University Bachelor of Health Science Proposed Curriculum

## BS HEALTH SCIENCES

YEAR ONE			***************************************		
FALL		SPRING			
Course	CR Hours	Course	CR Hours		
ENG 101	3	ENG 102	3		
BSC 120	4	BSC 121	4		
MTH 127	3	CMM 103	3		
SOC 200/PSY 201	3	CLS 105	3		
FYS 101	3	CD 101	3		
TOTAL	16	TOTAL	16		
YEAR TWO					
FALL		SPRING			
CHM 211	3	CHM 212	3		
BSC 227	4	PHY 203	3		
MTH 225	3	PHY 204	1		
PHY 201	3	DTS 201	3		
PHY 202	2	BSC 228	4		
		WAC Elective	3		
TOTAL	15	TOTAL	18		
YEAR THREE					
FALL		SPRING			
BSC 250	4	HP 250	3		
CHM 217	3	CHM 218	3		
HP 200	3	WAC Elective	3		
Fine Art Elective	3	HP 400	3		
SWK 203	3	Humanities Elective	3		
TO TAX		BOTAL.	17		
TOTAL	16	TOTAL	15		
YEAR FOUR					
FALL		SPRING			
DTS 409	3	*HP 456	6		
*HP 441 cap. dev.	3	*HP 457	3		
*HP 450 (seminar)	1	Elective	3		
CMM 302 (presentations)	3	*HP 455	1		
Elective	3				
TOTAL	13	TOTAL	13		
Grand Total			121		

<sup>\*</sup>indicates new course required

## APPENDIX C PROPOSED COURSE DESCRIPTIONS

### BSC 120 Principles of Biology (4)

Study of basic biological principles common to all organisms through lecture and laboratory activities. Chemistry of life, cell biology, metabolism, heredity, and evolution. Intended for science majors and pre-professional students. 3 lec-2 lab. (PR: at least 21 on Math ACT, or C or better in MTH 121or higher)

## BSC 121 Principles of Biology. 4 hrs.

A continuation of the study of basic biological principles common to all organisms. Diversity of life, phylogeny, structure, function, and ecology. Intended for+ science majors and pre-professional students. 3 lec-2 lab. (PR: BSC 120; Grade of *C* or better in BSC 120 recommended)

## CLS 105 Introduction Medical and Laboratory Terminology (3)

Introduction to health sciences careers and professions, emphasizing programs at Marshall University. Features practitioners involved in health care delivery and educational programs and common language found in medical and laboratory settings.

#### CMM 103 Fundamentals of Speech Communication (3)

A course designed to enhance the development of critical thinking skills and their application to verbal and nonverbal interaction in interpersonal and public communication contexts.

#### CMM 308 Persuasive Communication (3)

Introduction to the understanding, practice and analysis of persuasion. Behavioral and rhetorical theories of persuasion will be examined and applied to contemporary persuasive communications. (PR: CMM 103)

#### DTS 201 Introductory Nutrition (4)

Provides basic understanding of the science of nutrition and dietetics. The role of food and nutrient intake in health promotion and disease prevention will be explored in hands-on laboratory experiences.

### DTS 409 Community Nutrition (3)

Nutritional needs of communities and dietitian's role in addressing them are identified, and community nutrition programs are closely examined.

#### **ENG 101 (3)**

Introduction to academic writing with emphasis on writing as a multi-stage process, critical thinking, and fundamental research strategies and skills. (PR: ACT English 18-27 [450 on the SAT] or ENG 100)

#### ENG 102 (3)

Academic writing with an emphasis on research related writing and higher levels of critical thinking and reading. (Not open to juniors and seniors. PR: English 101 or equivalent)

## HP 200 Introduction to Epidemiology (3)

This course provides an introduction to epidemiology for undergraduate students.

#### HP 250 Introduction to Public Health (3)

Course introduces students to the concepts and models of public health.

#### HP 400 Global Health (3)

This course provides students the opportunity to study health care systems in developed and developing countries and compare these systems to the U.S. health care system.

#### HP 441 Capstone Developments (3)

The capstone project serves to demonstrate the student's proficiency in the major field of study. It is the culmination of coursework in the students area of concentration.

#### HP 450 Health Sciences Seminar (1)

Explore student's challenges and successes in the major field of study. Serves as a source for reflection to assist students to retain focus in their journey to program completion.

#### HP 456 Clinical Practicum (6)

Focus is on providing students with the opportunity to complete a practical experience in their area of emphasis.

#### HP 457 Research for Health Sciences (3)

Focuses on the research process and methodology. Development of critical thinking skills and needed to analyze and evaluate research findings for health care will be discussed.

#### HP 255 Health Sciences Seminar (1)

Introduces students to the possibilities associated with a BHS degree.

## APPENDIX D

BSH – BACHELOR IN HEALTH SCIENCES FIVE-YEAR PROJECTION OF PROGRAM SIZE

	First Year (2012)	Second Year (2013)	Third Year (2014)	Fourth Year (2015)	Fifth Year (2016)				
Number of Studen	Number of Students Served through Course Offerings of the Program:								
Headcount	_40	87	132	<u> 177</u>	185				
FTE	_40_	_87_	<u>132</u>	177	185				
	Number of Student Credit Hours Generated by Courses within the Program (entire academic year):								
	<u>120</u>	_231	823	_1,600	<u>1,600</u>				
Number of Majors	:								
Headcount	_40_	_87_	132	_177	185				
FTE majors	40	_87_	132	<u>177</u>	185				
Number of Student Credit Hours Generated by Majors in the Program (entire academic year):									
contine academic ye	1.280	2,784	4,224	5,664	<u>5,920</u>				
Number of Degrees to be Granted (annual total):									
	0	0	_0_	<u>37</u>	45				

## APPENDIX E

BSH – BACHELORS IN HEALTH SCIENCES FIVE-YEAR PROJECTION OF OPERATING RESOURCE REQUIREMENTS

ı	First Year	Second Year	Third Year	Fourth Year	Fifth Year
	(2012)	(2013)	(2014)	(2015)	(2016)
A. FTE POSITIONS					
1. Administrators	0	0	_0_	_0_	_0_
2. Full-time Faculty	_1_	_1_	_2	_2_	_2_
3. Adjunct Faculty	_0_	_0_	_0_	_0_	_0_
4. Graduate Assistants	0	<u></u>		_0_	0
5. Other Personnel:		·			
a. Clerical Workers	1	1	I	1	1
b. Professionals				0	0
Note: Include percentage of time	e of current personn	iel			
B. OPERATING COSTS (Appr	opriated Funds On	ly)			
1. Personal Services:					
a. Administrators	0	0	_0_	_0_	0
b. Full-time Faculty	<u>75,000</u>	<u>77,250</u>	159,135	<u>163,909</u>	<u>168,826</u>
c. Adjunct Faculty	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
d. Graduate Assistants	_0_	0	0	_0_	0
e. Non-Academic Personnel:					
Clerical Workers	30,000	_30,900_	31,827	32,782	33,765
Professionals		_0_	0	0	0
Total Salaries	<u>105,000</u>	108,150	190,962	<u>196,691</u>	202,591

	First Year (2012)	Second Year (2013)	Third Year (2014)	Fourth Year (2015)	Fifth Year (2016)
2. Current Expenses	<u>0</u>	Ō	<u>0</u>	<u>0</u>	<u>0</u>
3. Repairs & Alterations	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
4. Equipment: Educational Equip. Library Books	<u>0</u> <u>0</u>	<u>0</u> <u>0</u>	<u>o</u>	<u>0</u> <u>0</u>	<u>0</u> <u>0</u>
5. Nonrecurring Expense Office furniture and computers.	10,000	<u>0</u>	10,000	<u>0</u>	<u>0</u>
Total Costs	115,000	108,150	200,962	<u>196,691</u>	202,591
C. SOURCES					
General Fund Appropriations     (Appropriated Funds Only)	**********		_		· ——
Reallocation	New funds		(Check one)		
Federal Government     (Non-appropriated Funds Only)	_	<del></del>			
3. Private and Other (specify)			_	··········	_
Total All Sources	******				

NOTE: Total costs should be equal to total sources of funding

<sup>\*</sup>Explain Your Method for Predicting the Numbers (Use additional sheet if necessary)