# West Virginia State University Board of Governors Academic Policies Committee Erickson Alumni Center, Weisberg Lounge June 15, 2017 10:30 a.m. – 11:30 a.m. Agenda

1.	Call to Order and Roll Call – Committee Chair Gail Pitchford presiding	
2.	Verification of Appropriate Notice of Public Meeting	2
3.	Review and Approval of Agenda	1
4.	Review and Approval of Minutes of Previous Meeting	3
5.	University Recommendations and Reports	
	<ul> <li>5.1 Rtqi tco 'Crrtqxcn</li> <li>5.1.1 Engineering, B.S. '''''''</li> <li>5.1.2 Sports Studies, M.S. ''''''''''''''''''''''''''''''''''</li></ul>	9 ;;
6.	Next Meeting Date – To be determined	

7. Adjournment

# West Virginia State University Academic Policies Committee

Date/Time: 6/15/2017 -- 10:30 AM

Location:

West Virginia State University Erickson Alumni Center Weisberg Lounge Institute, WV

Purpose: To conduct the regular business of the Committee in preparation for the June 15, 2017 Board of Governors meeting.

Notes:

This is a compliant meeting.

Meeting was approved: 6/6/2017 8:10:56 AM

# West Virginia State University Board of Governors Academic Policies Committee Erickson Alumni Center, Weisberg Lounge Minutes April 27, 2017

#### 1. Call to Order and Roll Call

Mr. Konstanty called the meeting of the West Virginia State University Board of Governors Academic Policies Committee to order at 10:11 a.m.

**Present:** Dr. Guetzloff, Mr. Kelley, Mr. Konstanty, Ms. Shafer, and Dr. Thralls. Several members of the administration, faculty, and staff were also present.

#### 2. Verification of Appropriate Notice of Public Meeting

Mr. Konstanty announced the Verification of Appropriate Notice of Public Meeting.

#### 3. Review and Approval of Agenda

Mr. Konstanty asked for approval of the agenda. Dr. Thralls made the motion, and it was seconded by Mr. Kelley. The motion passed.

#### 4. Review and Approval of Minutes of Previous Meeting

Mr. Konstanty asked for approval of the minutes of the previous meeting. Dr. Thralls made the motion, and it was seconded by Mr. Kelley. The motion passed.

#### 5. University Recommendations and Reports

# 5.1 Program Review

#### 5.1.1 Chemistry, B.S.

Dr. Jayasuriya provided an overview of the program review for Chemistry, B.S. It was stated that the faculty members in the department are active. Student organizations are also very engaged and have won several awards. The follow-up report will be due December 1, 2018. Dr. Thralls noted the recommendation from the review committee indicated continuation of the program at the current level of activity without specific action; however, there is a specific action. Dr. Jayasuriya said this is how the reviews are typically worded. He stated that a follow-up report for assessment was requested prior to his arrival at the University and the report was not received. Dr. Guetzloff confirmed that no report was received. Dr. Thralls asked if the process that has been in place the last few years will continue to ensure that follow-up reports are received, and Dr. Jayasuriya affirmed it would.

Dr Guetzloff noted that the University does not have an assessment person as Mrs. Vicky Morris-Dueer has resigned. Committee discussion was held on the exit of Mrs. Morris-Dueer and the importance of filling the position as quickly as possible, as well has how assessment will be handled in the interim.

Mr. Kelley inquired of the appendix of the report for Program Enrollment Data. He questioned if it was normal to have so many majors but so few graduates. Dr. Jayasuriya commented it was not normal, but he was not sure of the reasons. Dean Naveed Zaman said that between the years of 2011-2012 and 2012-2013 there was a decrease in the number of majors and that number is now increasing. Dr. Zaman felt the program is back on track and stated that five students will be graduating from the program this spring. The projections for graduation rates will be positive in the next academic year as well. Dr. Jayasuriya commented that the numbers are low, but the University should look at ways to success. For example, if a student decides not to be a doctor after applying for the major, they should have options that would still allow them to graduate the fastest way possible. Dr. Jayasuriya said that is why he changed the General Education required hours from 53 hours to 37-40. Dr. Guetzloff mentioned that one of the problems is students whom are pharmacy majors apply to pharmacy school and, unless there is a reverse articulation agreement, they will not be counted as a West Virginia State University graduate. Mr. Kelley asked what would be a good ratio of a yearly graduation number if there were 40 students. Dr. Guetzloff answered if all participating went through the program, he would like to see around five students a year. He also commented that when the University has students in a professional degree it needs to be tracked better for the report.

Dr. Thralls inquired if there were 40 majors in the program. Dr. Jayasuriya commented that figure was incorrect, but there were three tracks and Option A had very few students. Dr. Ernest Sekabunga commented that the least amount come from Option B (Applied Chemistry). He felt that Option A (ACS Certified) and Option B have the same number of students, but ultimately Option C (Pre-Med/Pre-Pharmacy) and Option A will graduate. Of the five students graduating this current semester, one was from Option A and four were from Option B. Ms. Shafer commented that, from her own personal experience, high school chemistry is vastly different from college chemistry. She felt that first-time freshmen have different expectations of what chemistry really is and often switch programs to Biology. She also mentioned chemistry is math heavy, and that is another reason students change to Biology.

Mr. Konstanty said that the recommendation is for the program to be continued at the current level and, although it says without action, a follow-up report on assessment will be due by December 1, 2018.

Dr. Thralls inquired about the number of full-time faculty members in the program and whether the University needs to build upon those numbers for enrollment. Dr. Jayasuriya commented that there are requirements for the Option A track, which is something to be proud of because the University's program is one of very few that are accredited by the American Chemical Society (ACS).

Mr. Kelley moved to adopt the Program Review Committee's recommendation to continue the program at the current level with the addition that a follow-up report on assessment is due on December 1, 2018. Dr. Thralls seconded the motion, and the

motion passed. Dr. Guetzloff abstained from voting as he is in the Chemistry Department.

#### 5.2 Recommendation on Academic Program

Due to an administrative error on the March 16, 2017 agenda, the recommendation to discontinue the Recreation Program was discussed but could not be voted on. Mr. Kelley asked about the impact on students if the program was discontinued. Dr. Jayasuriya answered that there are only six students in the program, and three are seniors with one graduating in the current semester and the other two graduating in the two consecutive semesters. The freshman and junior students have been contacted and are discussing their options such as changing majors or studying with full-time and adjunct faculty with the use of course substitutions.

Dr. Guetzloff commented that five years ago it was stated that programs with low enrollment would be reviewed for discontinuation, and he felt the warning was possibly disregarded. He said it is important that the faculty heed such warnings to prevent this type of unfortunate situation. Mr. Konstanty expressed appreciation for the comment and said while he does not know if this was an issue of someone not heeding a warning, but his perspective since being on the Board is that programs that no longer command interest of students and enrollment reaches a certain point, the program would be reviewed for possible discontinuation. He further stated that at one time this particular major was viable, but it is not any longer and the Committee needs to address the issue. He said he would not want to place any blame on any former administrator, faculty member, or dean as the recommendation is driven by the students not demanding this major. Dr. Guetzloff concurred with Mr. Konstanty; however, he felt that particular area could have been more adaptive to the students and made changes to make the program more attractive.

Dr. Thralls commented that he has served on the Academic Policies Committee for many years and there is a lot of program development and not many programs that are discontinued. He said that no one wants to discontinue programs, but it is a natural part of the process that sometimes programs are not viable and it should not be viewed as a defeat. Dean Paige Carney expressed that this discontinuation is unfortunate, but the Return on Investment data is clear. It was stated that there is another Health and Human Performance faculty member that is taking over some of the courses and is already involved in teaching for the program.

Dean David Bejou said he discussed the program with the former provost several years ago, and it was his understanding that there was an interest in merging the Recreation Program with the Marketing and Business Program to create a tourism concentration, a program he felt is needed in this region. Research conducted at that time showed this would be a viable program. Dean Bejou said he was in support and was unsure of what happened after that point. Mr. Konstanty did not recall there being a great interest in the concentration at that time from the College of Business and Social Sciences; however, he felt if Dean Bejou could foresee a way that the faculty involved in the current program may be utilized in that College it would be beneficial. Dr. Jayasuriya commented that there was a choice to implement another program or tourism, and the choice was made to implement other programs. Dr. Thralls commented that perhaps a tourism track could emerge from established demand.

Dr. Thralls made the motion to support the discontinuation of the Recreation Program. Mr. Kelley seconded the motion, and the motion passed with a dissenting vote from Dr. Guetzloff.

Mr. Konstanty opened up the floor to any comments from the audience. Dean Zaman mentioned the NASA Day event. Mr. Konstanty said the Energy Management Program in the College of Business and Social Sciences is attempting to be accredited by the American Association of Professional Landmen (AAPL). He mentioned there are only nine schools that are accredited by the organization. Three to four internships have been secured with Energy Corporation of America (ECA) and students will be interning there over the summer 2017 semester.

Mr. Konstanty said he will be meeting with Jeff Barnes, owner of the Jeff Barnes Agency in Huntington, to secure an internship for the Communications Department at the conclusion of the meeting. He encouraged the Committee and audience to be aware of their connections for possible internships for students. Mr. Kelley commented that Chuck Bailey of Bailey and Wyant would like to hire an accounting graduate for his law firm.

Dean Bejou thanked Mr. Konstanty for being instrumental in making the Energy Management Program successful and felt that his Oil and Gas law class has been a major contribution. He also mentioned the success with the Business, Economics, and Social Sciences Summit and Human Rights Conference that were both hosted by the University.

#### 6. Next Meeting Date – June 15, 2017

#### 7. Adjournment

With there being no further business, a motion was made by Dr. Thralls and seconded by Ms. Shafer to adjourn the meeting. The motion passed. The meeting adjourned at 10:51 a.m.

Respectfully submitted,

Betsy L. Allen



# BACHELOR OF SCIENCE IN ENGINEERING WITH A MAJOR IN CHEMICAL ENGINEERING PROGRAM PROPOSAL

JUNE 2017

## Checklist

6.1. The cover page should include the following:

Name of Institution Date Category of Action Required Title of Degree or Certificate Location Effective Date of Proposed Action Brief Summary Statement

- 6.2. Program Description
  - 6.2.a. Program Objectives
  - 6.2.b. Program Identification
  - 6.2.c. Program Features
    - 6.2.c.1. Admissions and Performance Standards
    - 6.2.c.2. Program Requirements
  - 6.2.d. Program Outcomes
  - 6.2.e. Program Content
    - 6.2.e.1. Content and Length of the Proposed Academic Program
    - 6.2.e.2. Coherent General Education Component
    - 6.2.e.3. Minimum Requirement for General Education

#### 6.3. Program Need and Justification

- 6.3.a. Relationship to Institutional Goals/Objectives
- 6.3.b. Existing Programs
- 6.3.c. Program Planning and Development
- 6.3.d. Clientele and Need
- 6.3.e. Employment Opportunities
- 6.3.f. Program Impact
- 6.3.g. Cooperative Arrangements
- 6.3.h. Alternatives to Program Development

#### 6.4. Program Implementation and Projected Resource Requirements

- 6.4.a. Program Administration
- 6.4.b. Program Projections
- 6.4.c. Faculty Instructional Requirements
- 6.4.d. Library Resources and Instructional Materials
- 6.4.e. Support Service Requirements
- 6.4.f. Facilities Requirements
- 6.4.g. Operating Resource Requirements
- 6.4.h. Source of Operating Resources
- 6.5. Program Evaluation
  - 6.5.a. Evaluation Procedures
  - 6.5.b. Accreditation Status

Full Proposal (§133-11-6)

# 6.1. Cover Letter (§133-11-6.1)

Name of Institution: West Virginia State University (WVSU)

Date: June 2017

Category of Action Required: Approval of a New Program Proposal

Title of Degree or Certificate: Bachelor of Science in Engineering (BSE)

Location: Institute, West Virginia

Effective Date of Proposed Action: Spring 2018

#### **Brief Summary Statement:**

West Virginia State University is proposing the addition of a Bachelor of Science in Engineering with a major in Chemical Engineering to its existing, approved 2+2 Engineering Programs. The program aligns with the objectives of the institution in providing student-centered instruction and preparing students to meet the engineering needs of the Kanawha Valley, state and nation, as well as to prepare them for future graduate study. In addition, it supports the institution's mission as a land-grant university to meet the higher education and economic development needs of the state and region through innovative teaching and applied research. A curriculum summary sheet for the proposed program is included in Appendix IV. Graduates of the proposed BSE program will complete 126 hours. The degree contains University-required general education courses, college level mathematics and basic science courses, courses in engineering topics and chemical emphasis courses. All appropriate committees within the institution have approved the proposed program. The proposed new program will require minimal additional resources. The program complies with the Engineering Accreditation Committee (EAC) of ABET, Inc., which is the principally recognized accrediting body for undergraduate engineering degrees.

# **6.2. Program Description**

#### 6.2.a) Program Objectives (§133-11-6.2.a)

The primary objectives of the proposed Bachelor of Science in Engineering program are as follows:

(1) Emphasize the fundamental applied roots of engineering with a heavy emphasis on practical/experiential/hands-on learning;

(2) Produce graduates that are experts at planning, design, construction or operation of engineering systems, solving problems and bringing proper insights to design and research teams;

(3) Produce graduates that are proficient in the use of  $21^{st}$  Century design, analysis and measurement tools and software;

(4) Produce graduates with soft-skills, including (a) professionalism, (b) communications, (c) team building, (d) societal, global and ethical awareness and (e) dedicated continuous learners that companies require of 21<sup>st</sup> Century engineers; and

(5) Provide professional service to the state, region and the nation.

Based upon national accreditation (EAC of ABET) criteria and program review committee, eleven Program Level Outcomes (PLO) have been established in section D [Program Outcomes (§133-11-6.2.d)] of this report. The outcomes are denoted by letters a, b, c, d, e, f, g, h, i, j, and k. Table 1 shows where these outcomes will be taught and how they will be assessed.

Course Number and Title	PLO Assessed	PLO Measure
ENGR 101: Engineering Problem Solving I	d,h,f,c,k,g,b	Exam, Report,
		Presentation
ENGR 102: Engineering Problem Solving II	k,e,a	Exam, Report
ENGR 241: Statics	a,e	Exam, HW
ENGR 243: Mechanics of Materials	a,e	Exam, HW
*ENGR 2xx: Engineering graphics/CAD	c,g,k	Report, Lab,
		Exam
*ENGR 3xx: Thermodynamics	a, e, k	Exam, Report,
		Lab
*ENGR 2xx: Dynamics	a,e	Exam, HW
*ENGR 4xx: Senior Design Projects	d,e,g,h,i,k	Report,
		Presentation
*ENGR 3xx: Fluid Mechanics	a,e,k,b	Exam, Report,
		Lab
*ChE 3xx: Chemical Equipment & Process Design I	a,b,c,e,g,i,k	Exam, Report,
		Lab
*ChE 2xx: Material and Energy Balance	a,b,c,d,e,f,g,g,i,j,k	Exam, Report,
		HW
*ChE 3xx: Transport Phenomena	a,b,c,e,g,j,k	Exam, Report,
		HW
*ChE 3xx: Chemical Engineering Lab I	a,b,e,g,k	Report, Lab,
		Presentation

#### Table 1: Program Objectives and Assessment

*ChE 4xx: Chemical Engineering Lab II	a,b,e,g,k	Report, Lab, Presentation
*ChE 3xx: Phase & Reaction Equilibrium	a,b,e,f,k	Exam, Report, HW
*ChE 4xx: Chemical Reaction Engineering	a,b,c,e,g,k	Exam, Report, HW
*ChE 4xx: Chemical Equipment & Process Design II	a,b,c,e,g,i,k	Exam, Report, HW

\*New courses are identified with asterisks.

#### 6.2.b) Program Identification (§133-11-6.2.b)

The proposed CIP code for this degree is 14.0101 –Engineering, General: "A program that generally prepares individuals to apply mathematical and scientific principles to solve a wide variety of practical problems in industry, social organization, public works and commerce. Includes instruction in undifferentiated and individualized programs in engineering."

(Source: National Center for Education Statistics, U.S. Department of Education, Classification of Instructional Programs (CIP 2010) at

https://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cipid=88198 (visited May 25, 2017).)

#### 6.2.c) Program Features (§133-11-6.2.c)

#### 6.2.c.1) Admission and Performance Standards (§133-11-6.2.c.1)

West Virginia State University is committed to implementing the highest-quality BSE with a major in Chemical Engineering program possible. There will be no provisional admission to the BSE program for any student. All students entering the program will have a minimum cumulative high school GPA of 2.0 and appropriate ACT or SAT scores.

#### **Admission Standards**

The WVSU BSE program will admit students according to the HEPC guidelines provided by \$133-23. The applicants will be evaluated according to the following rubric:

- 1. Academic Record
  - a. High School GPA a minimum overall 2.0 on 4.0 point scale
    - i. Acceptable previous work from accredited college or university
  - b. Appropriate ACT or SAT scores
  - c. Successful TOEFL scores for those whose native language is not English

#### **Performance Standards**

To receive this degree, students must satisfy the following standard college requirements for graduation (Source: West Virginia State University 2016-2017 Catalog):

- 1. A cummulative grade point average of 2.0 (i.e., a C average) on all work attempted with the exception of developmental courses and courses with grades of P, K, W and AUD;
- 2. A cummulative grade point average of 2.0 in major courses;
- 3. Completion of the total number of hours required in the curriculum elected; and

4. The necessary residence requirement for a degree.

The relationship between the admission standards and the performance standards is essential because those students who meet the admission standards will have the necessary skills to successfully achieve the performance standards while fulfilling the program learning objectives. Moreover, those persons who cannot do the aforementioned will not successfully perform to the standards required by the WVSU BSE with a major in Chemical Engineering.

#### 6.2.c.2) Program Requirements (§133-11-6.2c.2)

The coursework will be divided into four distinct areas — University-required general education courses, college level mathematics and basic science courses, courses in engineering topics, and chemical engineering emphasis courses. Each stream will begin with foundational courses and progress to more advanced courses, each meant to impart necessary content and skills that will make student success possible in later courses.

The WVSU BSE degree will consist of 126 credit hours of required courses. Transfer students may import credits to WVSU based upon the West Virginia Higher Education Policy Commission's Transfer Agreement, as well as the discretion of the engineering faculty.

In addition, the students will develop a Senior Design Project during their final year. Moreover, students will create a portfolio that presents their professional work. The intent is for the portfolio to be a resource of the students' achievements that they can utilize in obtaining employment.

#### 6.2.d) Program Outcomes (§133-11-6.2.d)

Based upon national accreditation (EAC of ABET) criteria, program review committee, the expected outcomes are:

- a. an ability to apply knowledge of mathematics, science and engineering;
- b. an ability to design and conduct experiments, as well as to analyze and interpret data;
- c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability;
- d. an ability to function on multidisciplinary teams;
- e. an ability to identify, formulate and solve engineering problems;
- f. an understanding of professional and ethical responsibility;
- g. an ability to communicate effectively;
- h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context;
- i. a recognition of the need for, and an ability to engage in life-long learning;
- j. a knowledge of contemporary issues; and
- k. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

#### 6.2.e) Program Content (§133-11-6.2.e)

The development of the WVSU Bachelor of Science in Engineering with a major in Chemical Engineering is in keeping with the West Virginia State University mission to meet the higher education and economic development needs of the state and region through innovative teaching and applied research. (http://www.wvstateu.edu/About/WVSU-At-A-Glance.aspx)

#### 6.2.e.1) Content and Length of the Proposed Academic Program (§133-11-6.2.e.1)

The BSE with a major in Chemical Engineering program will follow the common practice of institutions and require eight semesters (four fall and four spring) provided in Table 2. Students will complete a total of 126 credit hours.

Course requirements for each categories are shown below (new courses are identified with asterisks):

MATH 206 CHEM 105/1 MATH 207 PHYS 231/20 MATH 208 MATH 415 PHYS 232/20 *MATH 2xx CHEM 106/1	07 General Chemistry I Calculus II 03 Physics for Science & Engineers I		4 5 4 5 4 4 5 3 5 39
ENGINEERI	NC		
ENGINEERI ENGR 101	Intro to Problem Solving I		2
ENGR 101 ENGR 102	Intro to Problem Solving I		23
ENGR 241	Statics		3
ENGR 243			3
ECON 202	Principles of Microeconomics		3
*ENGR 2xx	1		2
*ENGR 3xx			3
	Fluid Mechanics lab		1
*ENGR 2xx			3
	Thermodynamics		3
	Senior Design Projects		3
TOTAL ENG	• •		29
CHEMICAL			
CHEMICAL		5	
	07 Organic Chemistry I	5	5
*ChE 2xx	08 Organic Chemistry II Metorial and Energy Balance		5
*ChE 3xx	Material and Energy Balance Transport Phenomena		3 3 2
*ChE 3xx	Chemical Engineering Lab I		2
*ChE 4xx	Chemical Engineering Lab II		
*ChE 3xx	Phase & Reaction Equilibrium		$\frac{2}{3}$
*ChE 3xx	Chemical Equipment & Process Design I		3
*ChE 4xx	Chemical Equipment & Process Design I Chemical Equipment & Process Design II		2 3 3 3
*ChE 4xx	Chemical Reaction Engineering		3
	EMICAL EMPHASIS		<u>3</u> 32

The following Table provides the curriculum sheet for the BSE with a major in Chemical Engineering.

#### Table 2: BSE with a Major in Chemical Engineering Curriculum Sheet

1st year Fall		cr. Hr.		1st year Spring		С
MATH 206	Calculus I <sup>1</sup>	4		MATH 207	Calculus II	Γ
ENGR 101	Intro to Engineering I	2		ENGR 102	Intro to Engineering II	Γ
G ED 101	Freshman Experience	3		PHSY 231/203	Physics for scientists and engineers I <sup>3</sup>	Γ
CHEM 105/107	General Chemistry I <sup>2</sup>	5	[	*ENGR 2xx	Engineering graphics/CAD	Γ
Tier I: B	Written Communication I	3		Tier I: C	Written Communication II	Γ
<sup>1</sup> Tier I: E (Mathema <sup>2</sup> Tier I: F (Scientific Tier I: B - ENGL 101,	•	17		<sup>3</sup> Tier II: E (Natural Sc Tier I: C - ENGL 102, E	cience) ENGL 102H, ENGL 112	
2nd year Fall		cr. Hr.		2nd year Spring	1	0
					Differential Equation for Scientists and	
MATH 208	Calculus III	4		MATH 415	Engineers	
PHYS 232/204	Physics for Scientists and Engineers II	5		ENGR 243	Mechanics of Materials	
ENGR 241	Statics	3		*ENGR 3xx/3xx	Fluid Mechanics	
CHEM 106/108	General Chemistry II	5		CHEM 205/207	Organic Chemistry I	
		17			То	1
3rd year Fall		cr. Hr.	1 F	3rd year Spring		(
CHEM 206/208	Organic Chemistry II	5	-	*ChE 3xx	Transport Phenomena	
*MATH 2xx	Probablility & Statistics for engineers	3	-	*ChE 4xx	Chemical Engineering lab II	
*ENGR 3xx	Thermodynamics	3		*ENGR 2xx	Dynamics	
*ChE 2xx	Material and Energy Balance	3		*ChE 3xx	Phase & Reaction Equilibrium	
*ChE 3xx	Chemical Engineering lab I	2		*ChE 3xx	Chemical Equipment & Process Design	
		16				
4th year Fall		cr. Hr.	I F	4th year Spring		(
*ChE 4xx	Chemical Reaction Engineering	3	-	*ENGR 4xx	Senior Design Projects	
Tier II: G	Wellness	2	-	Tier II: D	History	
ECON 202	Principles of Microeconomics <sup>4</sup>	3		Tier II: A	Arts	L
*ChE 4xx	Chemical Equipment & Process Design II	3		Tier II: B	Humanities	
Tier I: D	Oral Communication	3		Tier II: C	International Perspectives	
Tier I: D - COMM 100 Tier II: G - HHP 122,	), ENGL 201 HHP 157, HHP 157H, HHP 242 Tier II: A - ART 101, ART	<b>14</b> 101H, CO	MM 17	0, MUSIC 107		Γ

BSE with a major in Chemical Engineering Curriculum Sheet West Virginia State University

Fier II: G - HHP 122, HHP 157, HHP 157H, <sup>\*</sup>Tier II: F - Social Science

MM 170, MI Tier II: A - ART 101, ART 101H, CC Tier II: D - HIST 201, HIST 201H, HIST 202, HIST 207, HIST 208

Tier II: B - ART 100, COMM 140, COMM 140H, ENGL 150, ENGL 150H, MUSC 104 Tier II: C - COMM 446.

\*new courses are identified with asterisks

Total Credit hour for graduation = 126

6.2.e.2) Coherent General Education Component (§133-11-6.2.e.2) All proposed undergraduate degree programs shall include a coherent general education component that is consistent with the institution's mission and appropriate to its educational programs. The undergraduate general education component shall be documented.

The BSE with a major in Chemical Engineering curriculum contains a General Education component that is in keeping with the current West Virginia State University curriculum for all

cr. Hr.

undergraduate degrees and is in accordance with the HEPC policy (**§133-11-6.2.e.2**). The full General Education requirements are provided below:

GENRAL EDUCATION CURRICULUM

Tier I: A. First Year Experience (3 cr.)

Tier I: B. Written Communication I (3 cr.) One of the following: ENGL 101, ENGL 101E, ENGL 101H

Tier I: C. Written Communication II (3 cr.) One of the following: ENGL 102, ENGL 102H, ENGL 112

Tier I: D. Oral Communication (3 cr.) One of the following: COMM 100, ENGL 201

Tier I: E. Mathematics (3 cr.)

MATH 206 – Cal I (4 credit)

Tier I: F. Scientific Reasoning (3-4 cr.)

One of the following: BIOL 101, BIOL 101H, BIOL 108, BIOL 110, BIOL 120, CHEM

100, CHEM 100H, PHYS 101, PHYS 102, PHYS 103, PHYS 106, PHYS 107, PHYS 110, PHYS

111, PHYS 120/121, OR CHEM 105

Tier II: A. Arts (3 cr.)

One of the following: ART 101, ART 101H, COMM 170, MUSIC 107

Tier II: B. Humanities (3 cr.)

One of the following: ART 100, COMM 140, COMM 140H, ENGL 150, ENGL 150H, MUSC 104

Tier II: C. International Perspectives (3 cr.)

One of the following: COMM 446, INTS 210, INTS 250, ENGL 350, ENGL 351, ENGL 440, FREN 101, FREN 102, FREN 205, FREN 443, GERM 101, GERM 102, SPAN 101, SPAN 102, SPAN 205, POSC 210, POSC 415, PHIL 308, EDUC 319, EDUC 321

Tier II: D. History (3 cr.)

One of the following: HIST 201, HIST 201H, HIST 202, HIST 207, HIST 208

Tier II: E. Natural Science (3-4 cr.)

One of the following: BIOL 101, BIOL 101H, BIOL 108, BIOL 110, BIOL 120, CHEM 100, CHEM 100H, PHYS 101, PHYS 102, PHYS 103, PHYS 106, PHYS 107, PHYS 110, PHYS 111, PHYS 120/121 OR PHYS 231

Tier II: F. Social Science (3 cr.)

One of the following: BA 210, BA 312, ECON 101, POSC 100, POSC 101, POSC 101H, PYSC 151, SOC 101, SOC 305, EDUC 201, OR ECON 202

Tier II: G. Wellness (2 cr.)

One of the following: HHP 122, HHP 157, HHP 157H, HHP 242

**6.2.e.3) Minimum Requirement for General Education** (§133-11-6.2.e.3) *The minimum requirement for general education for all undergraduate programs delivered through the traditional distributed curricula is 24 for transfer associate's degrees, and 30 for bachelor's degrees. If the general education component is delivered through integrated, embedded, interdisciplinary, or other accepted models, institutions must demonstrate that the program meets minimum requirements equivalent to the distributed model.* 

The General Education curriculum for the BSE with a major in Chemical Engineering program is in keeping with current practices at West Virginia State University.

# 6.3. Program Need and Justification

#### 6.3.a) Relationship to Institutional Goals/Objectives (§133-11-6.3a)

The Mission of WVSU reads "West Virginia State University will meet the higher education and economic development needs of the state and region through innovative teaching and applied research." As engineering is one of the main engines of the economy and, according to West Virginia Economic Outlook 2016, the chemical industry accounts for one-fifth of manufacturing sector jobs and nearly 40 percent of the manufacturing sector's economic output in West Virginia, this proposed program at WVSU will produce graduates well prepared for the needs of the state and the region.

There are several special features of West Virginia State University that make it suitable for such a program. First, WVSU is a historically black college, and, hence, has always had a mission to educate minorities and other underrepresented populations. Second, as a land-grant institution established on March 17, 1891, under the Second Morrill Act of 1890, WVSU is charged with providing educational opportunities for students, citizens and surrounding communities via its tripartite mission of research, teaching and outreach. Third, the University, "a living laboratory of human relations," is a community of students, staff and faculty committed to academic growth, service and preservation of the racial and cultural diversity of the institution. Lastly, WVSU offers flexible course schedules in traditional classrooms and online to facilitate financially-challenged students to continue their study concurrently with their job.

#### 6.3.b) Existing Programs (§133-11-6.3b)

Table 3 summarizes the baccalaureate program available in the state of West Virginia. Marshall University offers a BS in Engineering degree (CIP code 14.0101) with an emphasis in Civil Engineering. West Virginia University (and its branch campus WVU Institute of Technology) offers a BS in Chemical Engineering program with the CIP code 14.0701. As a research university, WVU is able to be extremely selective in its enrollment, drawing from not only from the best and brightest of the state's applicants but also from national and international applicants. According to HEPC, only 49 percent of students enrolled at WVU are in-state. As Tables 4 and 5 indicate, students in the Kanawha Valley are eager to stay close to the Charleston area, and a BES program (CIP code 14.0101) with a major in Chemical Engineering at West Virginia State University will serve the need of those students. In addition, the curriculum will be designed with an emphasis on practical/experimental/hands-on learning.

Institution	Institution	CIP	Program Type
	Туре	Code(s)	
Marshall University	Public	14.0101	BS in Engineering (Civil Concentration)
WVU Institute of	Public	14.0701	BS in Chemical Engineering
Technology			
West Virginia	Public	14.0701	BS in Chemical Engineering
University			

#### 6.3.c) Program Planning and Development (§133-11-6.3c)

Planning activities for this proposal actually date back to the year 2013, with the development of a 2+2 Engineering program at WVSU. Formal development of this proposal began in summer 2015. During a series of meetings, faculty from the 2+2 Engineering program, Physics program and Mathematics program first developed an Intent to Plan (approved by the WVSU Board of Governors on March 16, 2017) and subsequently submitted to HEPC Chancellor Paul Hill for approval. In a letter dated April 20, 2017, Chancellor Hill granted approval to initiate the development of a Bachelor of Science in Engineering with a major in Chemical Engineering program. This letter can be found in the Appendix III.

Significant resources have already been invested in this program. Two engineering faculty were hired, and approximately \$50,000 in equipment was bought to establish two engineering labs. Engineering software was purchased to teach the current engineering course work, as well as the future course work, once the full program is approved. A significant amount of time has been invested in the creation of this program.

#### 6.3.d) Clientele and Need (§133-11-6.3d)

The expected clientele for this program will mainly come from the usual student body of WVSU, which includes:

- minorities;
- underrepresented populations;
- non-traditional students;
- first generation college students; and
- international students.

Moreover, the clientele will include individuals working in the engineering field who want more advanced training.

The needs that will be met by this program may be broken down into societal, occupational, educational and public service needs.

Societal needs would include:

- providing an educated citizenry;
- preparing students to enter the workforce;
- providing continuing education or retraining to current workers; and
- increasing economic development in the service area of WVSU by attracting companies looking for a well-educated, technologically-skilled workforce.

#### Occupational Needs:

The Kanawha Valley is the economic hub of the State of West Virginia. Economic development and sustainability of any state is directly connected to engineering. According to West Virginia Economic Outlook 2016, the chemical industry accounts for one-fifth of manufacturing sector jobs and nearly 40 percent of the manufacturing sector's economic output in West Virginia. Chemical engineers apply the principles of science and mathematics to solve problems that involve the production or use of chemicals, fuel, drugs, food and many other products. They design processes and equipment for large-scale manufacturing, plan and test production methods and byproducts treatment and direct facility operations. According to the West Virginia Department of Commerce, a large portion of West Virginia's industry is chemical manufacturing. The Department reported that West Virginia is home to about 140 different chemical-related companies that provide over 12,800 jobs to the state. This makes West Virginia the location of one of the largest number of chemical manufacturing companies in the world. An adequate supply of chemical engineers is critical to the goal of fostering a statewide environment that nurtures these high-tech industries. Finally, according to Bureau of Labor Statistics, U.S. Department of Labor<sup>1</sup>, employment of engineers is projected to grow 4 percent from 2014 to 2024 (Figure 1).

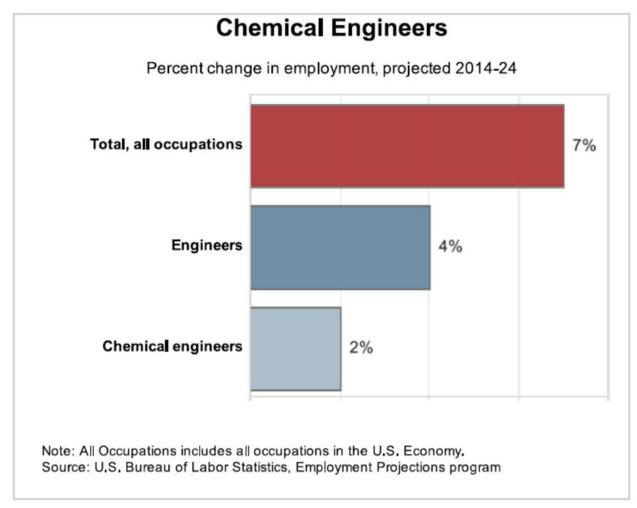


Figure 1: Projected growth of job according to US Department of Labor (2017)

<sup>1</sup>Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Chemical Engineers,

on the Internet at http://www.bls.gov/ooh/architecture-and-engineering/chemicalengineers.htm (visited *Feb 12, 2017*)

Public service needs would include:

- educating the citizens of West Virginia; and
- serving as a source of technical expertise.

#### Student Demand for the Program:

The University has good evidence of student demand for an engineering program at WVSU. The student enrollment of the current Engineering 2+2 program (Civil, Mechanical, Industrial) increased from a few students to 22 students within one year. A brief survey of these engineering students was conducted (See Table 4). A significant result is that 79 percent of the engineering students want to complete their BSE at WVSU. Another survey was of freshmen in other disciplines (Biology/Pre-Medical, Computer Science, Chemistry, undecided etc.) as shown in Table 5. The survey found that out of 67 non-engineering students, 15 wanted to complete a B.S. in Engineering. Another 15 students indicated that they would have enrolled in Engineering if a four-year B.S. in Engineering program had existed (at the time of their enrollment) at WVSU.

Number Surveyed	Willing to Complete 4-year BSE at WVSU		
Number Surveyed	Yes	No	
14	11	3	

Major	Number Surveyed	Willing to Complete 4-year BSE at WVSU		If 4-year Engineering existed one year ago, would you have enrolled in the Engineering Program?	
		Yes	No	Yes	No
Biology	34	6	28	6	28
Undecided	3	1	2	1	2
Psychology/Clinical Psychology	2	1	1	1	1
Computer Science	12	2	10	2	10
Chemistry/Applied Chemistry	8	2	6	2	6
Pre-Dental	2	0	2	1	1
Pre-Pharm	1	0	1	0	1
Political Science/Pre-Law	1	1	0	1	0
Elementary Education	1	0	1	0	0
Biotechnology	1	0	1	0	1
Math/Computer Science	1	1	0	0	1
Business	1	1	0	1	0
Total:	67	15		15	

Table 5: Survey	of Students	Currently No	ot in Engine	ering Prog	pram at WVSU
Tubic 5. Survey	of Staucius	Currently 110	n in Engine	<i>cring</i> 1708	

#### 6.3.e) Employment Opportunities (§133-11-6.3e)

One of the ways to measure the employment opportunities available for graduates of the BSE with a major in Chemical Engineering at WVSU is to investigate the national statistics of employment opportunities. According to the Bureau of Labor Statistics, West Virginia ranked fourth in the country in states with the highest concentration of jobs and location quotients in chemical engineering. The annual mean wages for chemical engineers in West Virginia is \$102,080. Currently, Charleston is one of the towns with the most employment opportunities for chemical engineers. The employment opportunities for the graduates of the BSE program is diverse partly due to the design of the curriculum. The graduates will be resourceful, highly trained and well prepared for a number of career opportunities. The graduates of the program are in a unique position to obtain employment after graduation due to proximity to the state's capital city. The industries with the highest levels of employment in this occupation are:

- 1. Basic Chemical Manufacturing;
- 2. Architectural, Engineering and Related Services;
- 3. Scientific Research and Development Service;
- 4. Resin, Synthetic Rubber and Artificial Synthetic;
- 5. Fibers and Filaments Manufacturing; and
- 6. Petroleum and Coal Products Manufacturing.

#### 6.3.f) Program Impact (§133-11-6.3f)

The BS in Engineering program, housed within the College of Natural Sciences and Mathematics, maintains that the impact will be positive and welcomed by those connected to the program in particular and the WVSU community in general. The BSE program will generate revenue for the University in the form of tuition and fees paid by incoming and retained students.

Many of the students currently in the 2+2 Engineering program are interested in a BS in Engineering degree, as shown in Tables 4 and 5. The number of inquiries about a four-year program also indicates students go to other institutions because of lack of a Bachelor's degree program in Engineering at WVSU. Even after the implementation of BS in Engineering with a major in Chemical Engineering program at WVSU, 2+2 Engineering programs (Civil, Mechanical and Industrial) will continue to operate.

#### 6.3.g) Cooperative Arrangements (§133-11-6.3g)

WVSU has transfer arrangements with the following institutions:

- BridgeValley Community and Technical College;
- Marshall University;
- New River Community and Technical College;
- Southern West Virginia Community and Technical College;
- West Virginia Northern Community and Technical College; and
- West Virginia University System.

As the BSE program develops, the University would explore opportunities for collaborative activities, such as:

- WVSU will share BridgeValley CTC's Process Simulating lab at their Advance Technology Center in South Charleston;
- Encouraging students to participate in internships through WVSU's Cooperative Education Office; and
- Creating 2+2 arrangements with other community and technical colleges.

#### 6.3.h) Alternatives to Program Development (§133-11-6.3h)

No alternatives were considered.

#### 6.4. Program Implementation and Projected Resource Requirements

#### 6.4.a) Program Administration (§133-11-6.4a)

Initially, the program will be administered by the department of Mathematics & Computer Science. Eventually, it may be desirable to create an Associate Chair of Engineering position in the department to focus on scheduling, program review and development, etc.

#### 6.4.b) Program Projections (§133-11-6.4b)

See Appendix I, Form 1.

#### 6.4.c) Faculty Instructional Requirements (§133-11-6.4c)

Currently, WVSU has two full-time faculty members, both with a terminal degree in engineering. The faculty were hired as a result of the 2+2 Engineering program with WVU. Most of the classes in the first two years of the BSE with a major in Chemical Engineering program will be taught by the current faculty members. Faculty resources to teach mathmetics, science and general education classes are already available at WVSU. It is estimated that two new faculty members will need to be hired, but not until the program is well-established.

#### 6.4.d) Library Resources and Instructional Materials (§133-11-6.4d)

The University has the existing library resources to deliver the program. The Library currently holds 22 journal subscriptions in the fields of mathematics, science and computer science. As the program develops, it is likely that increased funding in this area will be necessary.

#### 6.4.e) Support Service Requirements (§133-11-6.4e)

The existing classrooms, computer and science labs and the Process Simulating lab at BridgeValley Community and Technical Center will be utilized to deliver the program. WVSU has included engineering as a part of its current Title III comprehensive development plan (2012-2017) and is proposing that engineering be included in the plan for the next five-year cycle (2018-2022). Funds are and will be available for faculty salaries and fringe benefits, equipment and supplies, renovations and other necessary items for the implementation of the program.

#### 6.4.f) Facilities Requirements (§133-11-6.4f)

Initially, no new facilities are needed, nor is the renovation of existing facilities needed. As the program develops into its third and forth years, we will utilize the fourth floor of Wallace Hall at WVSU and some existing chemical laboratories at BridgeValley Community and Technical Center to carryout the Chemical Engineering laboratory experiments.

#### 6.4.g) Operating Resource Requirements (§133-11-6.4g)

See Appendix II, Form 2.

#### 6.4.h) Source of Operating Resources (§133-11-6.4h)

WVSU has included engineering as a part of it current Title III comprehensive development plan (2012-2017) and is proposing that engineering be included in the plan for the next five-year cycle

(2018-2022). Funds are and will be available for faculty salaries and fringe, equipment and supplies, renovations and other necessary items for the implementation of the program.

## **6.5. Program Evaluation**

#### 6.5.a) Evaluation Procedures (§133-11-6.5a)

In a technical program such as a Bachelor of Science in Engineering, assessment occurs continuously based on how students perform. However, for purposes of data collection, some specific assessment mechanism will be used.

1) <u>Common Exam Component</u>: Many of the courses (see Table 6) will culminate in a required exam. A portion of the exam will consist of a set of questions selected for program assessment purposes. The pool of appropriate exam questions will be developed by the faculty who regularly teach the courses and cover the core knowledge in the courses necessary for mastery of the subject. It will allow us to determine what students have learned in the program and how well they have learned it. The data provided by the test will help determine what and how well the students learned in the program, as well as identify and improve areas of the program where there is a pattern of student weakness. In addition to the required exam, project presentations, reports, home work and lab work will be assessed for the PLO listed in Table 6.

2) <u>Student Feedback</u>: Each student will be surveyed in all engineering courses through an exit interview process before graduation. The surveys will include questions on how well the program prepared students for employment and continued training, as well as seek ideas for improving the program. The surveys will provide data of indirect assessment for the PLO listed in Table 6.

3) The program will be part of the standard review process for programs at West Virginia State University. As part of this process, quantitative data on majors, graduates, courses taught, etc. will be generated and recorded.

Course Number and Title	PLO Assessed	PLO Measure
ENGR 101: Engineering Problem Solving I	d,h,f,c,k,g,b	Exam, Report,
		Presentation
ENGR 102: Engineering Problem Solving II	k,e,a	Exam, Report
ENGR 241: Statics	a,e	Exam, HW
ENGR 243: Mechanics of Materials	a,e	Exam, HW
*ENGR 2xx: Engineering graphics/CAD	c,g,k	Report, Lab,
		Exam
*ENGR 3xx: Thermodynamics	a, e, k	Exam, Report,
		Lab
*ENGR 2xx: Dynamics	a,e	Exam, HW
*ENGR 4xx: Senior Design Projects	d,e,g,h,i,k	Report,
		Presentation
*ENGR 3xx: Fluid Mechanics	a,e,k,b	Exam, Report,
		Lab

#### Table 6: Program Objectives and Assessment

*ChE 3xx: Chemical Equipment & Process Design I	a,b,c,e,g,i,k	Exam, Report, Lab
*ChE 2xx: Material and Energy Balance	a,b,c,d,e,f,g,g,i,j, k	Exam, Report, HW
*ChE 3xx: Transport Phenomena	a,b,c,e,g,j,k	Exam, Report, HW
*ChE 3xx: Chemical Engineering Lab I	a,b,e,g,k	Report, Lab, Presentation
*ChE 4xx: Chemical Engineering Lab II	a,b,e,g,k	Report, Lab, Presentation
*ChE 3xx: Phase & Reaction Equilibrium	a,b,e,f,k	Exam, Report, HW
*ChE 4xx: Chemical Reaction Engineering	a,b,c,e,g,k	Exam, Report, HW
*ChE 4xx: Chemical Equipment & Process Design II	a,b,c,e,g,i,k	Exam, Report, HW

\*New courses are identified with asterisks.

#### 6.5.b) Accreditation Status (§133-11-6.5b)

Once the program is approved by the West Virginia State University Board of Governors and West Virginia Higher Education Policy Commission, the institution will seek approval from the Higher Learning Commission of the North Central Association. As the program develops, the University would seek ABET accreditation. The criteria ABET uses for evaluating engineering programs (as detailed in the 2017-2018 Criteria for Accrediting Engineering Programs) are provided in Appendix V.

Appendices

Appendix I Program Projection – FORM 1

## Title 133, Form 1:

# Five Year Projection of Program Size

	First Year (2018)	Second Year (2019)	Third Year (2020)	Fourth Year (2021)	Fifth Year (2022)
Number of Students Served through Course Offerings of the Program:					
Headcount	20	30	38	46	50
FTE	12	18	23	28	30
Number of student credit hours generated by courses within the program (entire academic year)	360	540	690	840	900
Number of Majors:					
Headcount	5	15	25	30	35
FTE majors	3	9	15	18	21
Number of student credit hours generated by majors in the program (entire academic year):	90	270	450	540	630
Number of degrees to be granted (annual total):	0	0	0	2	4

Appendix II Operating Resource Requirements – FORM 2

# Five Year Projection of Total Operating Resources Requirements

	First Year (2018)	Second Year (2019)	Third Year (2020)	Fourth Year (2021)	Fifth Year (2022)
A. FTE Positions					
1. Administrators	0	0	0	0.25	0.25
2. Full-time Faculty	2(100%)	2(100%)	2(100%)	2.75(73%)	2.75(73%)
3. Adjunct Faculty	0	0	4	2	2
4. Graduate Assistants	0	0	0	0	0
5. Other Personnel:					
a. Clerical Workers	0	0	0	0	0
b. Professionals	0	0	0	0	0
Note: Includes percentag	e of time of c	urrent person	nel		
		-			
B. Operating Costs (Appr	opriated Funds	s Only)			
1. Personnel Services:	-				
a. Administrators	0	0	0	15,000	15,000
b. Full-time Faculty	130,000	130,000	130,000	185,000	185,000
c. Adjunct Faculty	0	0	10,000	5,000	5,000
d. Graduate Assistants	0	0	0	0	0
e. Non-Academic Person	nel				
Clerical Workers	0	0	0	0	0
Professionals	0	0	0	0	0
Total Salaries	130,000	130,000	140,000	205,000	205,000
2. Current Expenses	0	0	0	500	500
3. Repairs and	0	Ū	Ū	000	000
Alterations	500	500	500	500	500
4. Equipment:					
Educational Equipment	90,000	90,000	90,000	90,000	90,000
Library Books	2,000	2,000	2,000	2,000	2,000
5. Nonrecurring Expense	)	,	,	,	,
(specify)	1,000	1,000	1,000	1,000	1,000
x 1 <i>11</i>	,	,	,	,	,
Total Costs	223,500	223,500	233,500	299,000	299,000

# Five Year Projection of Total Operating Resources Requirements

	First Year (2018)	Second Year (2019)	Third Year (2020)	Fourth Year (2021)	Fifth Year (2022)
C. <b>Sources</b> 1. General Fund Appropriat	ions				
(Appropriated Funds Only)	73,500	73,500	83,500	149,000	149,000
X_Reallocation	New fu	inds			
2. Federal Government (Non-appropriated Funds Only)	150,000	150,000	150,000	150,000	150,000
3. Private and Other (specify)	0	0	0	0	0
Total All Sources	223,500	223,500	233,500	299,000	299,000

Appendix III HEPC Intent to Plan Approval

Bruce L. Berry, M.D. Chair	R CLASSIC R	Paul L. Hill, Ph.D. Chancellor
	eading the Way: Commission Access Succ West Virginia Higher Education Policy Commi	
	1018 Kanawha Boulevard, East, Suite 700 Charleston, West Virginia 25301	RECEIVED
	www.wyhepcedu April 20, 2017	APR 2 8 2017
		ACADEMIC AFFAIRS

Dr. Anthony L. Jenkins President West Virginia State University Post Office Box 1000 Campus Box 399 Institute, WV 25112

Dear President Jenkins:

I approve the request from West Virginia State University to initiate the development of the following programs:

- Bachelor of Science in Engineering with a major in Chemical Engineering
- Master of Science in Sports Studies
- Master of Science in Computer Science

The proposals for implementation should be prepared in accordance with the language and provisions of Series 11, Submission of Proposals for New Academic Programs at Public Regional Institutions and the Monitoring and Discontinuance of Existing Programs. While the proposals will need to address the appropriate elements of Series 11, I encourage you to closely examine the institutional commitment that will be required to position the necessary resources, both human and financial, to support and sustain the proposed programs.

Addressing these issues will facilitate the timely review of your program proposals, once submitted. If you have questions or need assistance, please contact the Academic Affairs Office.

Chancellor

cc: Dr. Kumara Jayasuriya, Provost, West Virginia State University Mr. Tom Bennett, II, Chief of Staff, West Virginia State University Dr. Corley Dennison, III, Vice Chancellor for Academic Affairs, Commission

> CHANCELLOR'S OFFICE (304) 558-0699 phone • (304) 558-1011 fax

Appendix IV Bachelor of Science in Engineering (BSE) Curriculum Summary Sheet

#### BSE with a major in Chemical Engineering Curriculum Sheet West Virginia State University

1st year Fall		cr. Hr.
MATH 206	Calculus I <sup>1</sup>	4
ENGR 101	Intro to Engineering I	2
G ED 101	Freshman Experience	3
CHEM 105/107	General Chemistry I <sup>2</sup>	5
Tier I: B	Written Communication I	3
<sup>1</sup> Tier I: E (Mathema	tics)	17

<sup>1</sup> Tier I: E (Mathematics)

<sup>2</sup> Tier I: F (Scientific Reasoning)

Tier I: B - ENGL 101, ENGL 101E, ENGL 101H

#### 2nd year Fall

2nd year Fall		cr. Hr.
MATH 208	Calculus III	4
PHYS 232/204	Physics for Scientists and Engineers II	5
ENGR 241	Statics	3
CHEM 106/108	General Chemistry II	5

3rd year Fall		cr. Hr.
CHEM 206/208	Organic Chemistry II	5
*MATH 2xx	Probablility & Statistics for engineers	3
*ENGR 3xx	Thermodynamics	3
*ChE 2xx	Material and Energy Balance	3
*ChE 3xx	Chemical Engineering lab I	2

1	1
т	ļ

17

4th year Fall		cr. H
*ChE 4xx	Chemical Reaction Engineering	3
Tier II: G	Wellness	2
ECON 202	Principles of Microeconomics <sup>4</sup>	3
*ChE 4xx	Chemical Equipment & Process Design II	3
Tier I: D	Oral Communication	3

Tier I: D - COMM 100, ENGL 201

<sup>4</sup>Tier II: F - Social Science

14 Tier II: G - HHP 122, HHP 157, HHP 157H, HHP 242 Tier II: A - ART 101, ART 101H, COMM 170, MUSIC 107 Tier II: D - HIST 201, HIST 201H, HIST 202, HIST 207, HIST 208

Tier II: B - ART 100, COMM 140, COMM 140H, ENGL 150, ENGL 150H, MUSC 104

Tier II: C - COMM 446,

\*new courses are identified with asterisks

1st year Spring		cr. Hr.
MATH 207	Calculus II	4
ENGR 102	Intro to Engineering II	3
PHSY 231/203	Physics for scientists and engineers I <sup>3</sup>	5
*ENGR 2xx	Engineering graphics/CAD	2
Tier I: C	Written Communication II	3
<sup>3</sup> Tier II: E (Natural Se	cience)	17

Tier I: C - ENGL 102, ENGL 102H, ENGL 112

2nd year Spring		cr. Hr.
	Differential Equation for Scientists and	
MATH 415	Engineers	4
ENGR 243	Mechanics of Materials	3
*ENGR 3xx/3xx	Fluid Mechanics	4
CHEM 205/207	Organic Chemistry I	5

To 16

3rd year Spring		cr. Hr.
*ChE 3xx	Transport Phenomena	3
*ChE 4xx	Chemical Engineering lab II	2
*ENGR 2xx	Dynamics	3
*ChE 3xx	Phase & Reaction Equilibrium	3
*ChE 3xx	Chemical Equipment & Process Design I	3
		14

4th year Spring		cr. Hr.
*ENGR 4xx	Senior Design Projects	3
Tier II: D	History	3
Tier II: A	Arts	3
Tier II: B	Humanities	3
Tier II: C	International Perspectives	3
		15

Total Credit hour for graduation = 126

Appendix V ABET Criteria for Accrediting Engineering Programs

#### I. GENERAL CRITERIA FOR BACCALAUREATE LEVEL PROGRAMS

All programs seeking accreditation from the Engineering Accreditation Commission of ABET must demonstrate that they satisfy all the following General Criteria for Baccalaureate Level Programs.

#### **Criterion 1. Students**

Student performance must be evaluated. Student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to attain program educationl objectives. Students must be advised regarding curriculum and career matters. The program must have and enforce policies for accepting both new and transfer students, awarding appropriate academic credit for courses taken at other institutions and awarding appropriate academic credit for work in lieu of courses taken at the institution. The program must have and enforce procedures to ensure and document that students who graduate meet all graduation requirements.

#### **Criterion 2. Program Educational Objectives**

The program must have published program educational objectives that are consistent with the mision of the institution, the needs of the program's various constituencies and these criteria. There must be a documented, systematically utilized and effective process, involving program constituencies, for the periodic review of these program educational objectives that ensures they remain consistent with the institutional mission, the program's constituents' needs and these criteria.

#### **Criterion 3. Student Outcomes**

The program must have documented student outcomes that prepare graduates to attain the program educational objectives. Student outcomes are outcomes (a) through (k) listed below plus any additional outcomes that may be articulated by the program.

- a. an ability to apply knowledge of mathematics, science and engineering
- b. an ability to design and conduct experiments, as well as to analyze and interpret data
- c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
- d. an ability to function on multidisciplinary teams
- e. an ability to identify, formulate and solve engineering problems
- f. an understanding of professional and ethical responsibility
- g. an ability to communicate effectively
- h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
- i. a recognition of the need for, and an ability to engage in life-long learning
- j. a knowledge of contemporary issues
- k. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice

#### **Criterion 4. Continuous Improvement**

The program must regularly use appropriate, documented processes for assessing and evaluating the extent to which the student outcomes are being attained. The results of these evaluations must be systematically utilized as input for the continuous improvement of the program. Other available information may also be used to assist in the continuous improvement of the program.

## **Criterion 5. Curriculum**

The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses. The faculty must ensure that the program curriculum devotes adequate attention and time to each component, consistent with the outcomes and objectives of the program and institution. The professional component must include:

- (a) One year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical and physical sciences.
- (b) One and one-half years of engineering topics consisting of engineering sciences and engineering design appropriate to the student's field of study. The engineering sciences have their roots in mathematics and basic sciences, but carry knowledge further toward creative application. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other. Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences, mathematics and engineering sciences are applied to convert resources optimally to meet these stated needs.
- (c) A general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.

Students must be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints. One year is the lesser of 32 semester hours (or equivalent) or one-fourth of the total credits required for graduation.

## **Criterion 6. Faculty**

The program must demonstrate that the faculty members are of a sufficient number and have the competencies to cover all of the curricular areas of the program. There must be sufficient faculty to accommodate adequate levels of student-faculty interaction, student advising and counseling, university service activities, professional development and interactions with industrial and professional practitioners, as well as employers of students.

The program faculty must have appropriate qualifications and demonstrate sufficient authority to ensure the proper guidance of the program and to develop and implement processes for the evaluation, assessment, and continuing improvement of the program. The overall competence of the faculty may be judged by such factors as education, diversity of backgrounds, engineering experience, teaching effectiveness and experience, ability to communicate, enthusiasm for developing more effective programs, level of scholarship, participation in professional societies and licensure as Professional Engineers.

## **Criterion 7. Facilities**

Classrooms, officies, laboratories and associated equipment must be adequate to support attainment of the student outcomes and to provide an atmosphere conducive to learning. Modern

tools, equipment, computing resources and laboratories appropriate to the program must be available, accessible and systematically maintained and upgraded to enable students to attain the student outcomes and to support program needs. Students must be provided appropriate guidance regarding the use of the tools, equipment, computing resources and laboratories available to the program. The library services and computing and information infrastructure must be adequate to support the scholarly and professional activities of the students and faculty.

## **Criterion 8. Institutional Support**

Institutional support and leadership must be adequate to ensure the quality and continuity of the program. Resources including institutional services, financial support and staff (both administrative and technical) provided to the program must be adequate to meet program needs. The resources available to the program must be sufficient to attract, retain and provide for the continued professional development of a qualified faculty. The resources available to the program must be sufficient to acquire, maintain, and operate infrastructures, facilities and equipment appropriate for the program and to provide an environment in which student outcomes can be attained.

## PROGRAM CRITERIA FOR CHEMICAL, BIOCHEMICAL, BIOMOLECULAR, AND SIMILARLY NAMED ENGINEERING PROGRAMS

These program criteria apply to engineering programs that include "chemical," "biochemical," "biomolecular," or similar modifiers in their titles.

#### 1. Curriculum

The curriculum must provide a thorough grounding in the basic sciences including chemistry, physics and/or biology, with some content at an advanced level, as appropriate to the objectives of the program. The curriculum must include the engineering application of these basic sciences to the design, analysis, and control of chemical, physical and/or biological process, including the hazards associated with these processes.



MASTER OF SCIENCE IN SPORT STUDIES PROGRAM PROPOSAL

JUNE 2017

## Checklist

6.1. The cover page should include the following: Name of Institution Date Category of Action Required Title of Degree or Certificate

Location

Effective Date of Proposed Action Brief Summary Statement

#### 6.2. Program Description

- 6.2.a. Program Objectives
- 6.2.b. Program Identification
- 6.2.c. Program Features
- 6.2.c.1. Admissions and Performance Standards
- 6.2.c.2. Program Requirements
- 6.2.d. Program Outcomes
- 6.2.e. Program Content
- 6.2.e.1. The content and length of the proposed academic program

#### 6.3. Program Need and Justification

- 6.3.a. Relationship to Institutional Goals/Objectives
- 6.3.b. Existing Programs
- 6.3.c. Program Planning and Development
- 6.3.d. Clientele and Need
- 6.3.e. Employment Opportunities
- 6.3.f. Program Impact
- 6.3.g. Cooperative Arrangements
- 6.3.h. Alternatives to Program Development

6.4. Program Implementation and Projected Resource Requirements

- 6.4.a. Program Administration
- 6.4.b. Program Projections
- 6.4.c. Faculty Instructional Requirements
- 6.4.d. Library Resources and Instructional Materials
- 6.4.e. Support Service Requirements
- 6.4.f. Facilities Requirements
- 6.4.g. Operating Resource Requirements
- 6.4.h. Source of Operating Resources

#### 6.5. Program Evaluation

- 6.5.a. Evaluation Procedures
- 6.5.b. Accreditation Status

# Full Proposal (§133-11-6)

## 6.1. Cover Letter (§133-11-6.1)

## Name of Institution: West Virginia State University (WVSU)

Date: May 2017

Category of Action Required: Approval of a New Program Proposal

Title of Degree or Certificate: Master of Science in Sport Studies (MS) Graduate Degree

Location: Institute, West Virginia

## Proposed implementation date: August 2018

## **Brief Summary Statement:**

West Virginia State University was founded under the provisions of the Second Morrill Act of 1890 as the West Virginia Colored Institute, one of 19 land-grant institutions authorized by Congress and designated by the states to provide for the education of black citizens in agriculture and the mechanical arts. In 2004, the West Virginia Legislature approved the institution's transition to University status. Today, WVSU offers 22 bachelor's degrees and five master's degrees. With a rich history and promising future, WVSU is positioned to become the most student-centered research and teaching, land-grant University in West Virginia and beyond.

In accordance with the vision and direction of President Anthony L. Jenkins, West Virginia State University began exploration of expanding services and programs for students. After departmental meetings and conferences with national authorities of strength and conditioning and wellness education, the Department of Health and Human Performance began planning for a graduate program in the summer 2016. It was decided that the Department would focus on a Master of Science in Sport Studies with an emphasis on General Health and Wellness, the first of its kind in West Virginia. The Intent to Plan was approved by the WVSU Board of Governors on March 16, 2017, and the West Virginia Higher Education Policy Commission on April 20, 2017.

## 6.2. Program Description a) Program Objectives (§133-11-6.2.a)

The main objective of this program is to provide students with a masters-level education in Sports Studies with an emphasis in General Health and Wellness. West Virginia State University will provide students with the cognitive and psychomotor skills necessary to achieve self-actualization while extending what they have learned in the "living laboratory of human relations" well beyond the lawns of the University campus.

Additionally, the Master of Science in Sports Studies Program will afford students the opportunity to actively engage in applied research and study innovative coaching, training, managing, teaching and safety education. This will lead the students toward a life of productive and meaningful work, lifelong learning and economic contribution to their surrounding communities and state. Under the graduate program, West Virginia State University will produce graduates well prepared to

continue or gain state and national certification through athletic coaching credentialing agencies, sports science credentialing agencies and sport safety credentialing agencies. Graduates will have the knowledge and skills to be poised and ready for advancement into management and leadership roles in their current respective fields. In addition to moving forward in their current career, the graduates from a Master of Science in Sport Studies program will be attractive to public and private school systems, university systems, wellness facilities and general fitness companies as employees. These highly educated and knowledgeable graduates will continue to serve our surrounding communities.

Lastly, yet perhaps most importantly, West Virginia State University is a historically black university, and, hence, has always had a mission to educate minorities and other underrepresented populations. Learning opportunities are embedded in environments that expose students to diversity and cultural differences. The diverse environment is beneficial to students seeking a graduate degree in sport studies as they strive for employment in the diverse and expanding sport industries. The proposed program will develop the professional knowledge skills and dispositions of Sport Studies candidates so that they may demonstrate the following programmatic objectives based on the NASPE National Standards for Athletic Coaches:

1. Demonstrate coaches as a role model to athletes of all ages and diversities through study and practice of sport philosophy, law, ethics, teaching and proper writing and accurate oral communication skills.

2. Demonstrate knowledge of human growth and development from birth to death, kinesthetic learning theories and tactics and current coaching and training trends by planning physiologically and biomechanically correct practice and conditioning sessions that allow for proper progression of skill and that are safe and minimize the risk of injury.

3. Demonstrate knowledge and skill for understanding diverse athletic populations and accommodating different learning styles and physical skill by planning, coaching and evaluating athletic performance and progression that include modifications that address these issues.

4. Exhibit knowledge of and abilities to create responsible and effective communities of sport learning and understanding by developing leadership and management frameworks that include criteria with specific attention to respect for other athletes, respect for the sport game, appreciation of diverse cultures, rules, abilities and talents and awareness of the need for communication.

5. Demonstrate knowledge of and the psychomotor skill needed to perform proper fitness testing and assessment data analysis to afford the fitness community the optimal results based on their desired fitness goals.

6. Demonstrate the appropriate use of technology required in the discipline of exercise science and athletic coaching.

7. Exhibit knowledge of what it means to be a member of the coaching/athletic profession by demonstrating ethical practice within the profession, demonstrating proper oral and written communication skills, engaging in research within the profession, following professional performance regulations and participating in continual education to uphold the commitment to life-long learning.

## b) Program Identification (§133-11-6.2.b)

The Classification of Instructional Programs (CIP), developed by the U.S. Department of Education Center for Educational Statistics, identifies the Sport Studies proposed program according to the following definitions:

## 31.0501: Health and Physical Education/Fitness, General.

A program that focuses on the general principles and techniques of administering a wide variety of schools and other educational organizations and facilities, supervising educational personnel at the school or staff level and that may prepare individuals as general administrators and supervisors.

## c) Program Features (§133-11-6.2.c)

WVSU proposes to create a research-based program in sport studies that will assist graduate students to develop the critical thinking and problem-solving skills to improve teaching, coaching and planning in school, athletic, wellness and public service settings. This is a sport studies program with an emphasis on wellness education and strength and condition. Current research by Smith (2013) suggests the need to increase the content understanding of exercise science principles among public school teachers and athletic coaches to reduce injury risk and produce optimal fitness results. Furthermore, Cramer (2014) and the United States Center for Coaching Excellence strongly suggest an advanced degree in the field of coaching, strength and condition or wellness for coaching professionals.

## 6.2.c.1 Admission and Performance Standards (§133-11-6.2.c.1)

The WVSU Sport Studies Program will be committed to admitting students on a competitive basis. The applicants will be evaluated by a submitted portfolio containing the following criteria:

- 1. Academic Record
  - a. An undergraduate degree in Education or a related field.
  - b. GPA a minimum overall GPA of 2.5 on a 4 point scale for all undergraduate work from accredited institution(s) with an MAT score of 350; or
    - i. GPA of 2.4 and MAT score of 360; or
    - ii. GPA of 2.3 and MAT score of 370; or
    - iii. Exceptional expertise in the field of coaching/fitness/health/strength and conditioning as demonstrated through an interview with the Graduate Studies Committee.
  - c. Successful TOEFL scores for those whose native language is not English.
  - d. Licensure testing scores from a state department, school district or university.
- 2. Resume/CV documenting successful professional experiences, commitment to community service and professional development.
- 3. A personal statement indicating the applicant's aspirations and reasons for pursuing the Master of Science in Sport Studies program at WVSU.
- 4. Three letters of recommendation attesting to the candidate's professional and/or personal qualities.

This program is designed to enhance the skills and knowledge of professionals in the field. The admission requirements are needed so that graduate students in this program have the experiences and educational preparation needed to benefit from the Master of Sport Studies experiences.

## 6.2.c.2 Program Requirements (§133-11-6.2c.2)

The coursework can be divided conceptually into three phases: core phase, advanced phase and internship phase. The courses in the core phase are for all candidates who are entering the program and seeking the Master of Science Degree. The advanced phase includes additional courses for candidates who are seeking the Master of Science Degree. The advanced phase will have six course options from which the student may choose. Three courses for a total of nine credit hours must be taken. The core phase begins conceptually with foundational courses and progresses to more advanced courses (advanced phase). When all course work is completed, the student will enter the final phase of the program, the internship phase. Early core courses are intended to give graduate students the knowledge and skills needed for success in later advanced phase courses.

The core phase focuses on general sport studies issues necessary for general understanding in the areas of sport, health, coaching and fitness, research methods, sports nutrition, sports psychology, advanced exercise testing, advanced exercise physiology, risk management and athletic injury prevention, and West Virginia sport history. The requirements in this phase total 21 credit hours.

The advanced phase builds on the concepts from the core phase to include topics of sport leadership, technology, teaching and coaching methods and professional certification. Experiences with action research are also included in the advanced phase. Courses include: Advanced Strength and Conditioning, Essentials of Personal Training, Tactical Strength and Conditioning, Principals of Educational Leadership, Advanced Methods in Wellness, and Technology for Educational Leaders.

The internship phase is a capstone internship experience designed to afford the student an opportunity to utilize their new knowledge and skills in the professional setting. A capstone action research project will also be completed while engaged in the internship experience. The total number of hours from the six hour internship phase, nine hours from the advanced phase and 21 hours from the core phase, equates to 36 hours to complete the Masters of Science in Sport Studies program.

The proposed Master of Science in Sport Studies program will offer open and rolling enrollment at the beginning of the fall, spring and summer semesters. Because the program utilizes open enrollment, once the program is established and students reach the advanced phase of the program, WVSU will offer the same six advanced phase courses in rotating sequence with each course designated as a fall, spring or summer semester course offering. The Master of Science in Sport Studies degree program will consist of 36 credit hours of required courses. It will be possible for students to graduate two years from the beginning of their matriculation in the program.

Included in the required internship phase of the program is HHP 650. During the HHP 650 internship experience/course, an action research project will be conducted. This will allow the student to utilize the best practices in their sport related career. This capstone project is an applied research endeavor that will demonstrate the extent of the competencies learned from the courses taken in the Master of Science in Sport Studies program. The graduate student will use management and research skills to produce action research based in the local community and district. Successful completion of the action research project shows that graduates have mastered the knowledge and skills from the Master of Science in Sport Studies program and are ready for the professional practice of sport industry leadership.

Moreover, graduate students will create a portfolio to present their professional work. The intent is for this portfolio to highlight the graduate's achievements so they can use the portfolio to review concepts and practices, amass professional information for employment purposes, enhance their leadership career, and compile information for the application process for professional advancement.

## d) Program Outcomes (§133-11-6.2.d)

The program evaluation for the Master of Science in Sport Studies program reflects the WVSU Mission Statement and the role of this land-grant institution. The program outcomes can be organized into three categories: Administration/Governance, Faculty Performance, and Student Considerations. Each of these categories has several outcomes that are essential to the success and future of the Master of Science in Sport Studies Program at WVSU.

**1. Administration:** The Master of Science in Sport Studies program functions under the leadership of the Program Coordinator who reports to the Department Chair. The Program Coordinator will lead the program, oversee student performance and programmatic quality and help the program to fulfill its mission:

- 1.1 The MS in Sport Studies faculty will be qualified to offer the necessary courses (See Appendix IV Faculty Curriculum Vitae).
- 1.2 The program will expend sufficient administrative resources to recruit/admit students, manage the program and offer support to program graduate students.

**2. Faculty Performance:** The Master of Science in Sport Studies program will retain faculty that are committed to quality teaching, research and service:

2.1 Faculty will be effective teachers in their respective subjects.

2.1.1 Instructor effectiveness will be measured by teaching evaluations, observations and innovative teaching techniques.

- 2.2 Faculty will be fully credentialed in assigned subjects measured by education, degrees earned, teaching experience and professional experience.
- 2.3 Faculty must be involved in academic life (broadly defined).
  - 2.3.1 Publications.
  - 2.3.2 Identified activities relating to academic participation.
  - 2.3.3 Identified activities relating to service to the University.
  - 2.3.4 Identified activities relating to student service.

**3. Student Considerations:** The Master of Science in Sport Studies program will recruit and retain students who are committed to academic success and public service in their communities:

- 3.1 The program will produce graduates competent in a variety of sport related careers.
- 3.1.1 Assessment: Rubric/Grade Mechanism to Measure Student Performance 3.1.1.a Rubrics to ensure that all National and Programmatic Standards are met.
- 3.1.2 3.1.1.b Surveys
  - 3.1.1.c Self-Study Reports
  - 3.1.1.d Survey of Graduates' Employment Placements
- 3.1.3 The program will ensure graduate student success through
  - 3.1.2.a Faculty Advising/Mentoring
  - 3.1.2.b Career Counseling/Mentoring
  - 3.1.2.c Job Search Assistance
  - 3.1.2.d Internships

3.1.3 The Master of Science in Sport Studies program will measure student success with learning activities that demonstrate meeting the competencies as defined by NASPE standards for athletic coaches and standards set forth by the National Strength and Conditioning Association.

The programmatic outcomes the program will follow are:

1. Demonstrate coaches as a role model to athletes of all ages and diversities through study and practice of sport philosophy, law, ethics, teaching and proper writing and accurate oral communication skills.

2. Demonstrate knowledge of human growth and development from birth to death, kinesthetic learning theories and tactics and current coaching and training trends by planning physiologically and biomechanically correct practice and conditioning sessions that allow for proper progression of skill and that are safe and minimize the risk of injury.

3. Demonstrate knowledge and skill for understanding diverse athletic populations and accommodating different learning styles and physical skill by planning, coaching and evaluating athletic performance and progression that include modifications that address these issues.

4. Exhibit knowledge of and abilities to create responsible and effective communities of sport learning and understanding by developing leadership and management frameworks that include criteria with specific attention to respect for other athletes, respect for the sport game, appreciation of diverse cultures, rules, abilities and talents and awareness of the need for communication.

5. Demonstrate knowledge of and the psychomotor skill needed to perform proper fitness testing and assessment data analysis to afford the fitness community the optimal results based on their desired fitness goals.

6. Demonstrate the appropriate use of technology required in the discipline of exercise science and athletic coaching.

7. Exhibit knowledge of what it means to be a member of the coaching/athletic profession by demonstrating ethical practice within the profession, demonstrating proper oral and written communication skills, engaging in research within the profession, following professional performance regulations and participating in continual education to uphold the commitment to life-long learning.

Course	Programmatic Outcome
ННР 500	2-6
HHP 510	1,2,4,7
ННР 533	2-6
ННР 537	1-7
HHP 540	1-7
ННР 550	1,2,4,7
HHP 560	1,7
ННР 600	1-7
ННР 630	1-7
HHP 640	1-7
HHP 650	1-7
HHP 646	1,2,4,6,7
EDUC 600	1,2,4,6,7
EDUC 625	1,2,6,7

To review how these sets of outcomes are applicable to the Master of Science in Sport Studies curriculum, the following table shows how each course aligns with the national standards used to create the programmatic outcomes.

Student learning outcomes of courses aligned with programmatic outcomes are presented on all course syllabi in Appendix I.

## e) Program Content (§133-11-6.2.e)

The Master of Science in Sport Studies program is consistent with and would further WVSU's institutional goals as outlined in the mission and vision: "...to meet the economic development

needs of the region through innovative teaching and applied research." The Master of Science in Sport Studies program will be implemented with the mission in mind. In addition, it would build upon the University's overarching emphasis on teaching, research and community service. A program to train professional sport and fitness leaders will increase the number of students served by reaching out to an untapped population of lifelong learners.

## e.1) Program Content (§133-11-6.2.e.1)

The Master of Science in Sport Studies program will follow the common practice of institutions and offer a master's degree program of 36 semester hours beyond the baccalaureate degree. On completing this program, graduate students may obtain the NSCA-CSCS Certification, NSCA-CPT Certification and/or the NSCA-TSAC Certification. Most working professionals will likely take two or more years to complete the Master of Science in Sport Studies program.

## The following courses will be developed as part of the degree program (\* for new courses):

Core Phase Courses for the MS in Sport Studies Degree Program

HHP 500. Advanced Exercise Testing HHP 510. Sport Psychology HHP 533. Risk Management and Injury Prevention HHP 537. Advanced Exercise Physiology HHP 540. Sports Nutrition HHP 550. Research Methods and Statistics in Physical Activity HHP 560. West Virginia Sport History

## Advanced Phase for the MS in Sport Studies Degree Program:

Students will select three of the following courses to satisfy the requirements of the advanced phase:

HHP 610. Tactical Strength and Conditioning HHP 620. Essentials of Strength and Conditioning HHP 630. Strength and Conditioning HHP 646. Advanced Wellness Methods EDUC 600. Principles of Educational Leadership EDUC 625. Technology for Educational Leadership

## **Full Catalogue Description of Courses (Presented in Phases)**

## **Core Phase**

#### HHP 500. **Advanced Exercise Testing**

This course is designed to provide students with the ability and knowledge to prescribe both anaerobic and aerobic exercise programs for the general population and with the emphasis on sport performance. This course will prepare students with skills and knowledge for building complete exercise programs for unique clients through the ability to perform pre exercise assessments. This course will also focus on interpretation of exercise assessments and aid in proper safe exercise prescription and techniques for athletes, special populations and overall general population in mind.

## HHP 510. Sport Psychology

The psychology of sport is the study of the interaction between psychological variables and performance in athletic and physical activity. The overall purpose of this course is to introduce students to psychological theory and practical skills that influence sport performance.

#### HHP 533. Risk Management and Injury Prevention

This course is designed to provide students the foundational risk management and injury prevention knowledge and methods that are pertinent for students preparing to enter the athletic coaching, strength and conditioning, or general wellness industries. Prevention, risk management strategies, recognition and care of athletic injuries, including environmental considerations, will be introduced. Emphasis is placed on orthopedic injury description, prevention, treatment and recovery.

## HHP 537. Advanced Exercise Physiology

This is an advanced exercise physiology course aimed at graduate students that possess a basic understanding of human exercise physiology. The primary goal of this class is to acquaint the students with knowledge, understanding and value of the relationship of contributing metabolic factors, temperature regulation and fatigue to physical exercise as they apply to athletic performance, fitness and extreme environments. Particular attention will be placed upon an understanding of muscle bioenergetics and metabolism as well as the cardiopulmonary responses to both acute and chronic exercise. Special topics to be addressed include exercise-induced oxidative stress, mechanisms of inactivity-induced muscle atrophy, performance at altitude and hydration during exercise. Finally, this course will incorporate a problem-based learning approach and emphasize the importance of critical thinking skills in exercise physiology.

## HHP 540. Sports Nutrition

This course provides a foundation in the science of sport and exercise nutrition and the correlation of nutritional practices and optimal human physical performance. The course will also teach students to learn how to facilitate and educate clients and athletes about general nutritional values and recommendations to maintain a healthy lifestyle, alter body composition and improve overall performance. It will cover chemical structure and biochemical metabolic functions of essential and nonessential nutrients, nutritional ergogenic aids, eating disorders, fluid intake and balance, thermoregulation and body composition will be discussed.

#### HHP 550. Research Methods and Statistics for Physical Activity

This course is designed to be an introductory experience for the research consumer as well as the research producer in sport studies. This course emphasizes developing conceptual understanding of using the scientific method as a means of problem solving, both as a critical consumer and as an entry-level researcher.

#### HHP 560. West Virginia Sport History

This course will examine the development of sports and competition in the State of West Virginia, from its inception, into organized forms of sports, to the highly developed enterprise that has emerged in contemporary times. Observations of the influence of Appalachian culture and history on this development as well as significant sport figures from West Virginia are central to the presentation and content of this course.

#### HHP 600. Essentials of Personal Training

This course is designed to prepare the student with the personal training knowledge, skills and abilities set forth by the NSCA. Emphasis on course content will be in nutrition and the role of personal trainer, latest guidelines for client assessment, flexibility training, cardiovascular exercise prescription, stability ball training and periodization training. The course will also address exercise prescription with special populations, aerobic and anaerobic exercise techniques and resistance training load. The course will also familiarize and enable the student to be able to be an instructor in the NSCA standards of exercise and fitness protocols set forth by the Department of Education in its physical fitness component.

#### HHP 630. Strength and Conditioning

This course provides students with information to complement and illustrate material taught in undergraduate level strength and conditioning (HHP 430). Emphasis will be placed on the theory and methodology of training and preparing athletes for competition. Students in this course will be given the practical knowledge of design, implementation, modification and assessment of strength and conditioning programs for athletes. Emphasis will be placed on modifying the strength and conditioning program to meet the coaches, team and individual athlete's needs.

#### HHP 640. Tactical Strength and Conditioning

This course is designed to address the physical demands of tactical professionals in the military, law enforcement and fire and rescue workers in conditioning and to aid in the decrease risk of injury. Covered areas in the course will include nutrition, supplements, injury treatment and rehabilitation, and assessment evaluations for tactical professionals. Students will also discuss and implement exercise drills, techniques and specific needs of the tactical athlete not limited to flexibility, mobility, speed, agility, power and aerobic and anaerobic conditioning.

#### HHP 646. Advanced Wellness Methods

This course is designed for professionals in the field of health, wellness, strength and conditioning and athletic coaching who are directly responsible for addressing the health and physical concerns of individuals of wide populations and children and adults in the community at large. The primary focus is on school-based health and physical education.

#### HHP 650 Internship in Sport Studies

This course serves as a capstone opportunity for the graduate level sports studies student to apply cognitive, psychomotor and affective competencies learned throughout their studies within the Sports Studies Program. Each student will work and learn with an existing wellness program, sports business, sports education/instructional program or sports team in the surrounding community (240 clock hours).

## EDUC 600. Principles of Educational Leadership

This course serves as an overview of educational leadership theories and their application. This is an introductory course for Leadership on Education.

#### EDUC 625. Technology for Educational Leadership

This course explores standard and emergent technologies related to effective instruction and administrative operations within a school. This course will provide students with both the theoretical and practical considerations for planning and implementing technology in public education settings, focusing on the role of instructional leaders.

Fall	Spring	Summer
2018	2019	2019
HHP 550	HHP 510	HHP 537
HHP 533	HHP 560	HHP 500
Fall 2019	Spring 2020	Summer 2020
HHP 540	Adv. Course 2	HHP 650
Adv. Course 1	Adv. Course 3	

The proposed initial sequence is as follows:

\* HHP 650 is an intensive six-month internship, so aspects of the internship will begin in spring 2020 or conclude in fall 2020, depending on individual arrangements.

## e.2) Program Content (§133-11-6.2.e.2)

Because the Master of Science in Sport Studies is a graduate program, this section is not applicable.

# 6.3. Program Need and Justificationa) Relationship to Institutional Goals/Objectives (§133-11-6.3a)

The Masters in Sport Studies program will assist with promoting the mission of West Virginia State University:

"To meet the higher education and economic development needs of the state and the region through innovative teaching and applied research."

The proposed program is consistent with the University mission in the following ways:

West Virginia State University is a Historically Black College (HBCU) created under the Second Morrill Act of 1890 as a land-grant institution. The institution, dating back to its founding in 1891, has a rich heritage of innovation based on some of the contributions of such human rights leaders as Booker T. Washington, W.E.B. Du Bois, Carter G. Woodson, Mary McCloud Bethune, Eleanor Roosevelt and the Rev. Leon Sullivan. These leaders have shaped WVSU's academic programs to make it a leader in the national HBCU network. Time Magazine coined the slogan, "A Living Laboratory of Human Relations" to describe the Institution's ability to integrate peacefully after the Brown vs. Board of Education decision of 1954.

WVSU serves the most diverse and only federally defined urban population center in West Virginia. It serves the capital city of Charleston and Greater Kanawha Valley with a population of over 150,000 people.

WVSU serves the Regional Education Service Agency III (RESA III) consisting of Boone, Clay, Kanawha and Putnam counties. Within these counties are public schools with some of the highest enrollments of students with low socio-economic statuses or from diverse populations in the state.

WVSU faculty and students in the region represent some of the highest degrees of diversity in the state.

WVSU's undergraduate sport studies program is nationally recognized by NSCA-ERP National Education recognition program, was re-recognized May 31, 2016, and will not be due for another evaluation until spring of 2019.

Therefore, based on the mission, history, service region, membership in the 1890 HBCU network and reputation for innovation, excellence and diversity, WVSU is able to achieve the educational objectives of the program and is the ideal location for the proposed program.

WVSU's strategic plan is expressed in the document, *Vision 2020: State's Roadmap to the Future*. Vision 2020 articulates several goals in the areas of Academic Programs, Research

Growth, Faculty Excellence and Rewards and Public Service. The Master of Science in Sport Studies program is most closely related to Goal II, which is to "develop academic programs to be responsive to student, stakeholder and community needs" and Goal III, which is to "review course delivery mechanisms to ensure that students can complete their degree in a timely fashion with the appropriate mix of in-person, online and hybrid courses."

Overall, this newly created Masters in Sport Studies program builds upon WVSU's expansion into graduate education, following its conversion from a college to a university. The creation of a Masters in Sport Studies program would further advance the values that guide WVSU's decisions and behavior. The Masters in Sport Studies program would enhance the academic excellence of the University by recruiting and retaining high quality graduate students and faculty. The faculty and graduate students produce research and foster a positive learning environment wherein ideas, solutions and planning are cultivated through academic freedom, curiosity and the willingness to help, which not only benefits the community and society, but also the University as a whole.

## b) Existing Programs (§133-11-6.3b)

No other college or university in the state have this type of unique graduate degree program. Other degree offerings at state institutions focus on either coaching aspects or exercise physiology and the wellness industry. The program at West Virginia State University is unique because it will educate the enrolled student in both much needed areas of content (coaching and physiology) and prepare each student to not only graduate with the intended knowledge and skill sets but prepare them for state, regional and national certification in both coaching and exercise science. Lastly, West Virginia State University historically provides students with an interwoven opportunity to work with diverse populations in their efforts to develop lifelong learners in a laboratory of human development. This experience would be found only at West Virginia State University, as it would be the only HBCU in the state offering a graduate degree in sport studies or related fields.

## c) Program Planning and Development (§133-11-6.3c)

The West Virginia State University College of Professional Studies, under the leadership of the Dean, Dr. J. Paige Carney, and the Health and Human Performance Chair, Aaron Settle, encouraged its Department of Health and Human Performance to create and implement a Master of Sport Studies. In addition, the WVSU Strategic Plan adopted in summer 2011 set the groundwork for the Master of Sport Studies program. Therefore, the WVSU Health and Human Performance Department responded to these institutional initiatives by proposing this Master of Sport Studies program.

The Intent to Plan was designed and written by Dr. Aaron A. Settle, Chair and Professor of Health and Human Performance and Program Director for the Bachelor of Science Degree in Sport Studies, Dr. J. Paige Carney, Dean of the College of Professional Studies, and Dr. Brenda Wilson, Professor of Education. The Intent to Plan was constructed in consultation with Dr. Kumura Jayasuriya, Provost and Vice President for Academic Affairs. The Intent to Plan was approved by the West Virginia State University Board of Governors in March 2017. The Intent to Plan was then approved by the Chancellor on April 20, 2017. (See Appendix III HEPC letter of approval.)

Planning for this degree program began in the fall of 2016 with the support of WVSU's

Administration and the Health and Human Performance Department. The department agreed on creating a Sport Studies graduate degree that showcases the history and mission of West Virginia State University.

Presently, three full-time faculty meet the qualifications to teach in the Masters of Sport Studies graduate program (See Appendix IV Faculty Curriculum Vitae). However, once the program is approved a search will be conducted to hire one additional graduate faculty for the 2018-2019 academic year. In terms of resources, the health and human performance department has the support of WVSU.

#### d) Clientele and Need (§133-11-6.3d)

The needs that will be met by this program may be broken down into societal, occupational, educational and public service needs.

#### Societal Needs Met

Providing an educated citizenry.

Responding to the concerns of obesity in this country.

Responding to the need for quality fitness, wellness and competition sought by citizens.

Responding to the growing needs for coaches at all levels of athletic competition--

from grade school through professional.

Preparing students to coach, train, motivate, manage, and assess in the fitness/wellness field. Preparing students who will promote ethically correct fitness and sport competition opportunities to people of all ages and abilities.

Preparing students who will meet the demands of a field that is growing and becoming more complex in terms of exercise science, sports medicine, coaching strategies and conditioning and training principles.

#### Occupational Needs Met

According to the <u>Occupational Outlook Handbook</u> (2015-2016), published by the U.S. Bureau of Labor Statistics, the "employment of athletes, coaches, umpires, and related workers is expected to increase faster than the average for all occupations through the year 2021. Employment will grow as the general public continues to participate in organized sports for entertainment, recreation, and physical conditioning.

Increasing participation in organized sports by girls and women will boost demand for coaches, umpires, and related workers.

Job growth also will be driven by the increasing number of baby boomers approaching retirement, during which they are expected to participate more and require instruction in leisure activities such as golf and tennis.

The large number of children of baby boomers also will be active participants in high school and college athletics and will require coaches and instructors."

#### Research Needs Met

Students will complete an internship specific towards the career they choose.

Students will be required to complete courses that will provide information about the latest research in their field.

Students will be required to complete multiple action research projects throughout the curriculum.

#### Public Service Needs Met

Educating citizens who desire to enter a field that is designed to help others increase the quality and length of their lives.

A survey was conducted in February 2017. Of those surveyed, the majority (93.2 percent) indicated they would be interested in pursuing a master's degree in sport studies at WVSU. The survey also found that 68.4 percent indicated they would want a blended in-seat/online program; whereas, 27.4 percent suggested a fully online program (See Appendix III, WVSU Graduate Survey). One participate shared, "I would definitely enroll in a graduate program and would much rather take graduate courses through State than elsewhere."

## e) Employment Opportunities (§133-11-6.3e)

According to the <u>Occupational Outlook Handbook</u> (2015-2016), published by the U.S. Bureau of Labor Statistics, the "employment of athletes, coaches, umpires, and related workers is expected to increase faster than the average for all occupations through the year 2021. Employment will grow as the general public continues to participate in organized sports for entertainment, recreation, and physical conditioning. Increasing participation in organized sports by girls and women will boost demand for coaches, umpires, and related workers. Job growth also will be driven by the increasing number of baby boomers approaching retirement, during which they are expected to participate more and require instruction in leisure activities such as golf and tennis. The large number of children of baby boomers also will be active participants in high school and college athletics and will require coaches and instructors." This outlook blends well with the vision of this new program at West Virginia State University, the efforts of our state to fight chronic disease and obesity and the increased focused on the fitness aspects of our state parks.

Many insurance companies now provide wellness plan support for members utilizing their service. The insurance companies require documented supervision and wellness plan creation for their members. Graduates from such a program as the Masters of Sport Studies will be eligible to be certified with the necessary credentials to be employed and complete billing information for the wellness centers that provide the health care based wellness plans.

## f) Program Impact (§133-11-6.3.f)

The Health and Human Performance Department within the College of Professional Studies will administer the Masters of Sport Studies Graduate program. Moreover, the graduate program will be open to professionals who have bachelor's degrees in any area related to sports, physical fitness and/or health, as long as the aforementioned prerequisites are satisfied. As previously noted, the Department maintains that the impact will be positive and welcomed by those connected to the program. The impact of the newly created Masters of Sport Studies program includes the following:

**Societal Impact:** West Virginia currently ranks as the third most obese state among adults and children. This program will satisfy the needs to educate well qualified individuals to work in our communities through a variety of resources to help combat the obesity epidemic lowers the quality of life for many of our citizens and hinders our progression as a community, region and state.

**Public Service Needs:** This program will be the only one of its kind and will be recognized by the NSCA as a Nationally Recognized Academic Program. This will provide a muchneeded venue of education for students desiring to learn more and master their craft to combat the obesity and chronic disease that is at epidemic proportions in our state.

**Occupational Needs:** Graduates of the program will be able to earn advanced certifications such as the NSCA-CSCS, NSCA-CPT and/or the NSCA-TSAC as leaders in the strength, conditioning and general sports field. Educators can satisfy continual education

requirements and/or seek permanent certification and increased salary scale. The proposed program will create a pool of educated individuals who are qualified to pursue the Educational Specialist or Doctorate degree at other institutions.

Action Research: Graduates of the program will be encouraged to share their findings from their action research projects at state, regional, national and international conferences through professional presentations and publications. Action research is based on the format of identifying a problem, exploring current research, creating a plan of action, implementing the plan and evaluating data on the plan's effectiveness.

**Graduate Demand:** Demographic data suggests there will be a continual increased need for certified individuals to work in the wellness, strength and conditioning, public education and parks and recreation fields due to the ever-expanding knowledge and understanding regarding fitness and its need for the decrease in chronic illness and for a more productive life among individuals of all populations. Opportunities are needed for trained and licensed professionals to advance to those positions. They will need to take graduate level courses to satisfy continual education requirements and qualify for advanced salary qualifications. Many prefer blended in-class and online courses so that they can balance professional and personal obligations with their desire for professional growth. This creates the need for master's degree programs that use on-line technology as well as in-class and in-lab learning for delivery.

**Community:** Many communities both local and national will benefit from an increased pool of candidates for positions in wellness, strength and conditioning, recreation and fitness. In addition, program will create graduates with a greater awareness of community and individual health needs and more strategies to meet these needs. This will contribute to vibrant, positive communities.

Additionally, the Masters of Sport Studies program will generate revenue for the University in the form of tuition and fees paid by incoming and retained students. The Masters of Sport Studies program will support the opportunity for individuals to obtain certifications for employment as sports, wellness and health leaders and supervisors. More importantly, this graduate program will impact the community, state and region by providing optimal leaders and promoting the mission of the College of Professional Studies to prepare qualified professionals to serve and lead in a global society.

## g) Cooperative Arrangements (§133-11-6.3g)

The importance of cooperative arrangements is essential to the creation, implementation and continuance of the Master of Sport Studies program. As mentioned earlier, the graduate program will utilize faculty in the Health and Human Performance Department to teach pertinent courses in the Master of Sport Studies program curriculum.

Currently, WVSU's undergraduate sport studies program has partnerships established with Nautilus Fitness Center, Dynamic Physical Therapy, St. Albans Studio of Dance and HYCAT Swimming. While there is no expectation that graduate students will serve with these organizations for their internships, the relationships developed with clients, professionals and administrators in these businesses will give the program a firm foundation of possible internship positions on which to build. Master of Sport Studies graduate students will complete an action research project related to a topic applicable to their future leadership position. National strength and conditioning standards require that the internship include field experiences in a fitness, sports or health based setting; however, part of the internship can be in other settings. The Kanawha Valley is rich in internship possibilities and settings.

## h) Alternatives to Program Development (§133-11-6.3.h)

During discussions regarding the creation of a Masters of Sport Studies program at West Virginia State University, there was one specific alternative that was considered: the creation of a 100 percent online-based Master of Sport Studies program. However, given the resources, demographics, laboratory based national outcome standards and proximity of WVSU to potential students and others, the Master of Sport Studies Program Development Committee decided the blended in-class and online method of delivery model better represents the needs of potential candidates and the wishes of those surveyed prior to the creation of the Intent to Plan.

## 6.4 Program Implementation and Projected Resource Requirements a) Program Administration (§133-11-6.4.a)

## Administrative Organization:

The Master of Science in Sport Studies program will be administered by the Health and Human Performance Department, which is housed in the College of Professional Studies.

## Changes to the existing Administrative Structure:

The Health and Human Performance Department will create a Graduate Studies Committee for oversight of the program. The Department Chair will appoint the Committee as well as a program coordinator to lead the Committee. All Committee members will meet the requirements for graduate faculty status. The Committee will be responsible for admissions decisions. All graduate admissions packets will be collected by WVSU Admissions and delivered to the program coordinator. The program coordinator and Graduate Studies Committee will review the applications and select candidates for the graduate program based on admissions criteria. In addition, the Graduate Studies Committee will initiate requests for new course offerings or changes in program requirements address issues necessary for the continuance of the program.

The program coordinator will be a member of the Health and Human Performance Department and have a dual appointment as both an undergraduate and graduate faculty member. As such, the program coordinator will have a three course (nine hour) teaching load each semester. A stipend equivalent to 25 percent of the program coordinator's salary will be made available so they can perform essential duties in the summer months.

The program coordinator will be responsible for:

- 1. Promotion and advertisement for the Master of Science in Sport Studies program;
- 2. Student recruitment and retention;
- 3. Mentoring of program participants;
- 4. Management of program budget;
- 5. Oversight of admission to the program;
- 6. Data collection for program assessment;
- 7. Coordination and collaboration with graduate faculty;
- 8. Supervision of Master of Sport Studies graduate teaching faculty; and
- 9. Scheduling Graduate course offerings.

Of the nine items listed above, the most important in terms of early success of the program are Student Recruitment and Retention and Mentoring of Program Participants. The position of program coordinator in the beginning years of the program will also include the roles of recruiter and mentor. Later, with anticipated program growth, the roles of recruiter and mentor may be assumed by additional faculty.

#### b) Program Projections (§133-11-6.4.b)

The undergraduate Education program at WVSU has a large contingent of graduates who have expressed interest in a master's degree program. Therefore, the Health and Human Performance Department faculty is confident that these graduates will help launch a successful recruitment program. Based on the experience of the master's programs in the Criminal Justice and Education Departments (both housed in the College of Professional Studies and also with a large contingent of loyal post-grads), the first graduate students admitted can be estimated to be 12 members, with groups increasing in size over the next several years to the point that the program will be recruiting 20 or more persons each semester.

See the table below for projected enrollment based on certain estimates of recruitment and retention.

	2018-19	201	9-20	202	0-21	2021	-22	2022	2-23
	Recruit	Recruit	Retain	Recruit	Retain	Recruit	Retain	Recruit	Retain
Year 1	20		8						
Year 2		22			10				
Year 3				30			12		
Year 4						33			12
Year 5								33	
Total Students – Estimate*	20		30	2	40	4	15	2	45
Tuition Generated*	\$169,118	\$26	1,287	\$35	8,834	\$428	,273	\$415	5,799

Enrollment Projections for first five years of the program including estimates of attrition:

\* Enrollment projection based on recruiting 20, 22, 30, 33 and 33 students in years 1,2,3,4 and 5 respectively. Retention and tuition estimates based on these assumptions about each of the recruitment years: for each year, 40 percent will finish in two semesters and two summers, 40 percent will finish in four semesters and two summers and 20 percent will take courses in their recruitment year at the rate of two courses each semester, but they will not be retained into a second year of study. For the 40 percent who are not accelerating, they are full time each semester and take six hours each summer. For the 40 percent who are not accelerating, they take six credit hours each semester and six credit hours each summer. For the 20 percent who are not retained, they take six credit hours each semester and the summer of the first year. Estimate based on all courses paid for at the in-state rate, with a 3 percent rate increase assumed for each year.

The program used the following *assumptions* to create a five-year projection of program size using the table described as FORM 1 in the Submission of Proposals document (133CSR11):

1. The program will recruit 12 students in the fall semester and 12 in the spring semester in the first year, gradually increasing to 20 per semester in the fifth year.

2. The program will retain about 82 percent of candidates recruited into the second year of the program, and all candidates retained will graduate at the end of the second year.

3. Each candidate will take two courses (six credit hours) in each term -- fall, spring and summer--for a total of 18 credit hours per academic year.

4. All students served by the programs will be majoring in sport studies and on course to receive a master's degree.

	First Year	Second Year	Third Year	Fourth Year	Fifth Year
	(2018-	(2019-	(2020-	(2021-	(2022-
	2019)	2020)	2021)	2022)	2023)
Number of Students Served through					
Course Offerings of the Program:					
Headcount:	20	30	40	45	45
FTE:	16.0	24.0	32.0	36.0	36.0
Number of student credit hours generated by courses within the program (entire academic year):	504	756	1008	1134	1134
Number of Majors:					
Headcount:	20	30	40	45	45
FTE majors:	16.0	24.0	32.0	36.0	36.0
Number of student credit hours generated by majors in the program (entire academic year):	504	756	1008	1134	1134
Number of degrees to be granted (annual total):	8	18	22	25	25

## FORM 1: FIVE-YEAR PROJECTION OF PROGRAM SIZE

## Assumptions for the table above:

Year 1, recruit 20, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 2, recruit 24, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 3, recruit 30, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 4, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 4, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 5, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 5, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 5, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 5, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year. Year 5, recruit 33, 40 percent finish summer 2017, 40 percent finish Spr-Sum 2018, 20 percent drop the second year.

## **Sustainability Plan:**

**Program Sustainability** 

The Master of Sport Studies program is a product of WVSU's institutional goals as outlined in the mission and vision: "...to meet the economic development needs of the region through innovative teaching and applied research." The Master of Sport Studies program will be designed and implemented with the land-grant institution mission statement in mind; it would build upon the University's overarching emphasis on public and community service by reaching out to an untapped population of "lifelong learners." This new program will build upon sport studies and the WVSU goals mentioned above are the foundation of the sustainability plan; the Master of Sport Studies program will promote those goals. Therefore, the program will have a viable sustainability plan that ensures successful continuation of the program after the initial five (5) year start-up plan.

There are eight essential aspects to a sustainability plan for a Master of Sport Studies program at WVSU:

- (1) Institutional support;
- (2) Funding stability;
- (3) Community partnerships;
- (4) Organizational capacity;
- (5) Program outcomes emphasis;
- (6) Program evaluation;
- (7) Program adaptation; and
- (8) Strategic planning.

The following table illustrates a selected list of the strengths in the plan that will provide the long-term sustainability necessary to support the overall vision of the University.

1 Togram Sustamability			
Institutional	Faculty	y Encouragement/Incentives	
Support		Opportunities to teach in the Graduate School	
		Increased Research Opportunities	
		Financial	
		Professional Development	
	Tools		
	Inc	rease in Library Resources	
		Internet/Technology	
		Classrooms	
	Admin	istrative Infrastructure	
		Admissions Recruitment	
		Processing Applications	
		Graduation Certification	
Funding	Tuitior	n and Fees	

## **Program Sustainability Plan**

Stability	
	NSCA – Strength and Condition Recognition and NSCA-Essentials of Personal Training Recognition.
	Recruitment
	Quality Standards
	Grants
	Local/State Partnerships
	Allow the program to fund training
	District and State partnerships for training sport leaders
	NSCA Research Grant
	Alumni Donations
Community	Research
Partnerships	Applied Projects that Improve Outcomes for Public and Private Fitness and Wellness Clients.
	Applied Projects that Promote Public Service and general wellness
	Advertisement
	"Leaders of Learning"
	Land-Grant Mission
	Internships
	Local and regional fitness and wellness facilities, rehabilitation clinics, performance enhancement clinics and school based athletic programs.
Organizational	Faculty Participation
Capacity	Teaching
	Advising
	Career Counseling
	Knowledge
	Individual
	Group
	Structural
	Resources
	Administrative Staff
	Faculty
	Facilities
Program	Measurable Assessment Plan

Outcomes	(See §133-11-6.5a)			
Emphasis				
Program	National Recognition Assessment Plan			
Evaluation	(See §133-11-6.5b)			
Program	Enrollment Flexibility			
Adaptation				
	Program/Curriculum Flexibility			
	Online			
	Additional Faculty as program expands			
	Community Needs			
Strategic	Institutional Mission			
Planning				
	Marketing Plan			
	Master of Sport Studies Graduate Studies Committee			

Summary: The institution has structures in place to ensure sustainability in many areas. The area of financial sustainability is a key concern. However, even conservative projections of growth show that, by the end of the first five years, funds from tuition and fees will make the program self-sustaining in terms of faculty salaries and basic expenses – even without funds from outside the program.

## c) Faculty Instructional Requirements (§133-11-6.4c)

Faculty members are the key to program success. Currently, the Health and Human Performance Department has one faculty member with a doctorate in Sport Management and is a Nationally Certified Athletic Trainer (ATC) and Nationally Certified Strength and Conditioning Specialist (CSCS) and three faculty members with Master's Degrees in Health Science, Teaching and Physical Education. All three of these additional faculty members are Nationally Certified Athletic Trainers and all have a minimum of 11 years of experience in wellness and athletic training. WVSU's Health and Human Performance Department faculty has strong academic credentials and experience that will enable them to skillfully launch a Master of Science in Sport Studies program. The program will be started with Dr. Aaron Settle ATC, CSCS, Mr. Matt Bradley, ATC, Mr. Jay Canterbury, ATC, Ms. Lindsey Good, ATC and Mrs. Debra Anderson-Conliffe. A table with their ranks and experiences is below.

Faculty Name	Faculty Rank	Higher Ed. Experience	Strength and Conditioning and Athletic Training Experience
Mr. Matt Bradley	Instructor	4 years	17 years
Mr. Jay Canterbury	Instructor	11 years	21 years
Mrs. Debra Anderson- Conliffe	Assistant Professor	21 years	8 years
Ms. Lindsey Good	Instructor	8 years	11 years

#### **Proposed Staffing for the First Five Years**

Dr. Aaron Settle	Professor	18 years	26 years
New Faculty Member			

The program is making certain assumptions about cost of faculty: 1) The program will be staffed by full-time faculty for the first five years. 2) The program will hire one full-time faculty member who will work full time for the program, at a cost of \$71,500 with fringe and benefits. 3) The program will deliver four courses per term for the first five years. 4) Beyond the cost of the new faculty member, the University will need to replace the work of the full-time faculty who are working on the program by hiring part-time faculty. 5) Offering four courses per semester plus course release for working as the Program Coordinator costs the institution the cost of the new full-time faculty member plus the cost of a part-time person teaching two courses each summer and four courses during the school year. 6) The cost of the program director, who is also serving as mentor and recruiter is about one-third of the cost of a full-time faculty member plus \$4,000 in the summer. 7) Each faculty member (adjunct or full-time) teaching on a summer contract costs the institution (with fringe and benefits) about \$2,300 per course. We are projecting all faculty costs to increase by three percent per year over the five-year period.

		Faculty Cost for Fall, Spring and Summer
Year 1	4 courses per semester & 2 courses in the summer	\$ 85,300
Year 2	4 courses per semester & 2 courses in the summer	\$ 87,859
Year 3	4 courses per semester & 2 courses in the summer	\$ 90,495
Year 4	4 courses per semester & 2 courses in the summer	\$ 93,210
Year 5	4 courses per semester & 2 courses in the summer	\$ 96,006
		\$ 452,869

Institutional Costs for Faculty for the first five years of the program:

## d) Library Resources and Instructional Materials (§133-11-6.4d)

The WVSU library purchases books that are pertinent to all areas of sport studies as requested by the Health and Human Performance Department.

However, additional resources will also need to be added to the library, including books and print and electronic subscriptions to journals in the field of personal training, tactical strength and conditioning, sport history and sport psychology.

These library resources will be essential both to keep faculty members up-to-date in the field and to contribute to faculty and student research endeavors.

Most of the top-ranking journals tend to publish articles geared to address the needs of practitioners rather than in-depth research-based articles. This suggests that readability and the time required to read articles are important concerns to a variety of strength and conditioning professionals—a logical conclusion considering the time constraints and other demands placed on them. The most frequently and widely read of these professional journals, *The Journal of Strength* 

and Conditioning, probably also owes its high ranking to the fact that it publishes a higher volume of articles than many other journals, covers a broad range of issues, and includes articles from authors with diverse perspectives. Of the top-ranking journals, *The American Journal of Sports Medicine* is likely to be the one most read by university educators because it was the only publication listed that is generally regarded as exclusively research-based and that does not cater to practitioners. Whichever publication provides the best fit, reading professional journals in the field of sport studies and strength and conditioning is not just the most efficient and effective way for practitioners and university educators alike to stay abreast of current issues in their field. It is a vital prerequisite.

Additional resources will also need to be added to the library, including books and print and electronic subscriptions to journals in the field of sport studies and strength and conditioning. These resources will include the following: . *Journal of Physiology, Medicine and Science in Sport and Exercise, Exercise and Sport Science Review, The Journal of Athletic Training, Journal of Sport Science, Journal of Aging and Physical Activity, Research Quarterly for Exercise and Sport, Journal of Human Kinetics.* 

The Masters in Sport Studies will need a library budget of approximately \$5,000.00 for the first and second years followed by an increase for the third, fourth, and fifth years (See Five-Year Projection Table). This will appropriately address the additional educational resources necessary for implementing a graduate degree.

## e) Support Service Requirements (§133-11-6.4e)

Additional resources are also necessary for creating program materials (website, brochures and application packets) and conducting recruitment and networking receptions (speaker honoraria, facility fees and/or refreshments). Once the program is established, increasing enrollments will make the program sustainable and profitable for the University. The support service requirements are as follows:

## Equipment

The Program Coordinator of the Master of Science in Sport Studies program needs a computer that can quickly and efficiently process the work. The computer needs to have a large hard drive to accommodate all of the student assessment data, a processor that can handle the statistical analysis necessary for program projections and projects, and software that can facilitate in the promotion and perpetuation of the Master of Sport Studies program. The students will need the same software in a computer lab to complete course requirements. An allocation every five years

should be sufficient, \$1,300 for the first allocation and then a yearly assessment should be completed to provide necessary updates.

Computer:	\$1,300.00
Software:	(STATA: Data Analysis and Statistical Software) x 22 (Computer Lab for Students) = \$4,765.00 – spread over two years – non-recurring expense.

## **Graduate Assistant**

A graduate assistant (GA) will be hired at the start of the program. The GA will assist the PC with the orientation, symposia, accreditation requirements, program website, brochures and promotion. The GA will receive tuition reimbursement as well as a monthly stipend. GAs will be added as the work load and enrollment of graduate students increase.

Tuition: \$4,316.00 Yearly (\$1,439.00 each semester – fall, spring, summer, starting Year 3)

Stipend: \$1,000.00 Monthly (10 months)

## **Travel & Training Budget**

In order to remain active in the discipline and knowledgeable regarding the national recognition process, the PC must be able to travel for training. There are three particular conference events that would be beneficial for the PC of the Masters of Sport Studies. The first is the annual national conference of the National Strength and Conditioning Association NSCA.

The second is the annual National Conference of the National Athletic Trainers Association (NATA).

The third is the annual AHE Assessment. This conference will allow the PC for the graduate program to stay updated on national assessment methods and trends to assure optimal learning over time within the graduate study program.

Travel & Training: \$2,000 in Year 1, \$5,000 in Years 2 through 5

## National Strength and Conditioning Association Education Recognition Program (NSCA-ERP)

WVSU must seek this national recognition if it is to remain a viable Master of Sport Studies program. NSCA requires three years of assessment data for continued recognition after initial recognition. Further, for each three (3) year recognition cycle, *NSCA* charges a \$500 fee.

Recognition Fee NSCA Graduate		
Strength and		
Conditioning Focus:	\$500	(Three year cycle)

Recognition Fee NSCA Graduate Personal Training and Wellness Focus: \$500 (Three year cycle)

#### **Student Support**

The students in the Master of Sport Studies program will be able to use the Career Center to help them with post-program job searches. Moreover, the graduate students can use any of the many services available on campus such as, Disability Services, The Writing Center, tutoring and library assistance.

The Center for Online Learning will provide support for both faculty and graduate students who experience challenges in using the online course management system. The Health and Human Performance Department graduate faculty will handle the academic advising for all graduate students. This is crucial for retention and successful program completion. There is no need to create new student support services; the current institutional structure is sufficient.

## f) Facilities Requirements (§133-11-6.4f)

The Master of Sport Studies program will occasionally need space for orientation, open house and other events to recruit students and promote the program. The program will need office space, furniture and computer for the graduate assistant and new graduate faculty member.

The Master of Sport Studies students should have a mailbox on campus so that pertinent information can be distributed to them in a timely fashion. Long-term, new offices will be needed when new faculty members are hired. A new office would require a new computer and new furniture.

FIVE-YEAR PROJECTION OF TOTAL OF	FIVE-YEAR PROJECTION OF TOTAL OPERATING RESOURCES REQUIREMENTS*				
	Year 1	Year 2	Year 3	Year 4	Year 5
	2016-17	2017-18	2018-19	2019-20	2020-21
A. FTE POSITIONS					
1. Administrators (PC)	0.25	0.25	0.25	0.25	0.25
2. Full-time Faculty	1	1	1	1	1
3. Adjunct Faculty (1.5 FTE [6 courses per year] for summer and to replace undergrad courses usually taught by existing faculty)	1.5	1.5	1.5	1.5	1.5
4. Graduate Assistants					
5. Other Personnel:					
a. Clerical Workers					
b. Professionals					
Note: Include percentage of time of current personnel					
B. OPERATING COSTS (Appropriated Funds Only)					
1. Personal Services:					
a. Administrators (Dean)					
Administrators (Chair)	8,625	8,798	8,973	9,153	9,336
b. Full time Faculty <sup>1</sup>	71,500	73,645	75,854	78,130	80,474
c. Adjunct Faculty <sup>2</sup>	13,800	14,214	14,640	15,080	15,532
d. Graduate Assistants <sup>3</sup>			15,784	16,574	17,403
Clerical Workers					
Professionals					
2. Current Expense <sup>4</sup>	2,200	5,200	5,200	5,200	5,200
3. Repairs and Alterations	200	200	200	200	200
4. Equipment:					
Educational Equipment <sup>5</sup>	1,300				
Library Books	5,000	5,000	11,000	12,000	12,000
5. Nonrecurring Expense (software) <sup>6</sup>	2,000	2,765			
Subtotal of Costs	104,625	109,822	117,011	136,336	140,144
C. SOURCES					
1. General Fund Appropriations <sup>7</sup> (Appropriated funds Only)					
Reallocation New funds	104,625	109,822	117,011	136,336	140,144
2. Federal Government (Non-appropriated Funds Only)					
3. Private and Other (alumni gifts)					
TOTAL ESTIMATED COSTS	104,625	109,822	117,011	136,336	140,144
TOTAL ANTICIPATED REVENUE PROJECTIONS	169,118	261,287	-		415,799

## g) Operating Resource Requirements (§133-11-6.4g) FIVE-YEAR PROJECTION OF TOTAL OPERATING RESOURCES REQUIREMENTS\*

#### Note: Total costs should be equal to total sources of funding

\*Explain your Method for Predicting the Numbers (use additional sheet if necessary)

<sup>1</sup>Fulltime faculty member at \$55,000 salary plus fringe and benefits.

 $^{2}$  Adjunct faculty cost is for two courses in the summer for a full time faculty member who is off contract and to replace four courses for faculty teaching MEIL courses who would normally be teaching undergraduate courses.

<sup>3</sup> Graduate assistants routinely receive tuition plus a stipend. Tuition for six credit hours per semester is \$1,439 for three semesters per year plus \$1,000 monthly for 10 months per year. One Assistant will be employed during third through fifth years. Tuition increase of 5 percent per year included in calculation.
 <sup>4</sup> For office supplies (\$200 yearly) and travel.

<sup>5</sup> For a new computer for the program coordinator.

<sup>6</sup>For software in the lab to support quantitative and qualitative research.

<sup>7</sup>Graduate tuition receipts will be reallocated within the institution to accommodate cost of program; Revenue will result from tuition of \$2,242 or six credit hours per semester for each of three semesters per year; annual tuition increases of 5 percent assumed in calculation.

#### h) Source of Operating Resources (§133-11-6.4h)

Looking again at FORM 1, the tuition generated clearly covers the anticipated costs in §133-11-6.4g. All operating resources are from the general fund, since new funds from tuition will cover the costs of the program.

	2018-19	2019-20	2020-21	2021-22	2022-23
Year 1	20	8			
Year 2		22	10		
Year 3			30	12	
Year 4				33	12
Year 5					33
<b>Total Students</b>	20	30	40	45	45
FTE (*.8)	16.0	24.0	32.0	36.0	36.0
Total Cr. Hrs(*25.2)	504	756	1008	1134	1134
Tuition generated*	\$ 169,118	\$ 261,287	\$ 358,834	\$ 428,273	\$ 415,799

FTE equals 80 percent of the total students, given the assumption of 20 percent electing to spread the requirements over more than two years.

# 6.5. Program Evaluations

## a) Evaluation Procedures (§133-11-6.5a)

Data collection, tied to program objectives, will be built into academic procedures to ensure the Institution collects the necessary data to assure standards are being met. The Health and Human Performance Department, in accordance with the National Strength and Conditioning Association (NSCA) and the National Association for Sport and Physical Education (NASPE) Standards for Athletic Coaches standards has established accepted performance standards and assessment strategies for the undergraduate BS in Sport Studies. The knowledge gained through this process will be applied to the Master of Sport Studies program. In 2020, data will be used to make program revisions between the first and second years of implementation, 2018 and 2019. By the second year, the program will admit students so that first- and second-year coursework will run simultaneously to each semester. The immediate goal of a new Master of Sports Studies program at WVSU is to develop industry leaders and advanced practitioners in the area of sport, wellness and strength and conditioning.

A second goal is to gain national recognition as a graduate program with NSCA approved and nationally recognized curriculum for both a strength and conditioning focus as well as a personal training focus.

The programmatic objectives along with the standards set forth by the NSCA and NASPE will be used to guide the implementation, administration and delivery of the program. The following is a selected list that will be used to measure the necessary outcomes:

1. Rubric Evaluation of PLC and NASPE Standards: Assignments in each of the courses will be evaluated using rubrics designed to evaluate the degree to which each graduate student is meeting the various programmatic outcomes that are created by linking national NASPE standards and NSCA Standards to each objective. The example below is a possible assignment in the HHP 500 Advanced Exercise Testing Course:

**Example Assignment:** Each student will responsible for teaching and demonstrating proper Olympic Lifting techniques for the following lifts (Hang Clean, Clean and Jerk, Back Squat, Snatch and Bench Press).

## NSCA OLYMPIC LIFT ASSESSMENT (VIDEO PROJECT)

This Assessment is Assessing Program Learning Outcomes # 3 and 5 as well as NASPE Standards D: 3 S:
12, 13, 14 and 15)

12, 13, 14 and 15) Standard/	Distinguished (4)	Accomplished (3)	Emerging (2)	Unsatisfactory (1)
Olympic Lift				, , , ,
Assessed				
Evaluation	( )	( )	( )	( )
Hang Clean	Student	Student	Student	Student did not
	performed and/or	Performed and/or	Performed and/or	perform and/or
PLO (3 and 5)	instructed the	instructed all but	instructed only 1	instruct any of the
	emphasis on triple	1 or 2 of the	or 2 of the	following:
NASPE (D:3 S: 12,	extension, bar	following:	following:	Triple Extension
13, 14 and 15)	placement,	Triple Extension()	Triple Extension()	Bar Placement
	proper grip,	Bar Placement ( )	Bar Placement ( )	Proper Grip
	proper landing,	Proper Grip ( )	Proper Grip ( )	Proper Landing
	Proper floor	Proper Landing ()	Proper Landing ()	Floor Return
	return	Floor Return ( )	Floor Return ( )	
		PLEASE Check	PLEASE Check	
		any/all areas that	any/all areas that	
		were NOT	were NOT	
		emphasized	emphasized	
Evaluation	()	( )	( )	( )
Clean and Jerk	Student	Student	Student	Student did not
	performed and/or	Performed and/or	Performed and/or	perform and/or
(PLO 3 and 5)	instructed the	instructed all but	instructed only 1	instruct any of the
	emphasis on triple	1 or 2 of the	or 2 of the	following:
NASPE (D:3 S: 12,	extension, bar	following:	following:	Triple Extension
13, 14 and 15)	placement,	Triple Extension()	Triple Extension()	Bar Placement
	proper grip,	Bar Placement ()	Bar Placement ()	Proper Grip
	proper landing,	Proper Grip ()	Proper Grip ( )	Proper Landing
	Proper Press,	Proper Landing ()	Proper Landing ()	Proper Press
	Proper floor	Proper Press ()	Proper Press ()	Floor Return
	return	Floor Return ()	Floor Return ()	
		PLEASE Check	PLEASE Check	
		any/all areas that	any/all areas that	
		were NOT	were NOT	
Fuch setting		emphasized	emphasized	( )
Evaluation	()	()	()	
Back Squat	Student	Student	Student	Student did not
	performed and/or	Performed and/or	Performed and/or	perform and/or
(PLO 3 and 5)	instructed the	instructed all but	instructed only 1	instruct any of the
1	emphasis on erect	1 or 2 of the	or 2 of the	following:
	back, bar	following:	following:	Erect back

NASPE (D:3 S: 12,	placement,	Erect back( )	Erect back( )	Bar Placement
13, 14 and 15)	proper grip, Heel	Bar Placement ( )	Bar Placement ()	Proper Grip
15, 14 anu 15)			• •	Heel Press
	Press,	Proper Grip ()	Proper Grip ()	
	Eyes up cue,	Heel Press ()	Heel Press ()	Eye Up Cue
	Proper racking	Eye up cue ( )	Eye up cue ( )	Proper racking
		Proper racking ()	Proper racking ()	
Standard/	Distinguished (4)	Accomplished (3)	Emerging (2)	Unsatisfactory (1)
Olympic Lift				
Assessed				
Evaluation	( )	( )	( )	( )
Snatch	Student	Student	Student	Student did not
	performed and/or	Performed and/or	Performed and/or	perform and/or
(PLO 3 and 5)	instructed the	instructed all but	instructed only 1	instruct any of the
	emphasis on triple	1 or 2 of the	or 2 of the	following:
NASPE (D:3 S: 12,	extension, bar	following:	following:	Triple Extension
13, 14 and 15)	placement,	Triple Extension( )	Triple Extension( )	Bar Placement
	proper grip,	Bar Placement ()	Bar Placement ()	Proper Grip
	proper landing,	Proper Grip ()	Proper Grip ()	Proper Landing
	Proper Press,	Proper Landing ()	Proper Landing ()	Proper Press
	Proper floor	Proper Press ()	Proper Press ()	Floor Return
	return	Floor Return ()	Floor Return ()	
		PLEASE Check	PLEASE Check	
		any/all areas that	any/all areas that	
		were NOT	were NOT	
		emphasized	emphasized	
Evaluation	( )	( )	( )	( )
Bench Press	Student	Student	Student	Student did not
	performed and/or	Performed and/or	Performed and/or	perform and/or
(PLO 3 and 5)	instructed the	instructed all but	instructed only 1	instruct any of the
	emphasis on	1 or 2 of the	or 2 of the	following:
NASPE (D:3 S: 12,	Shoulder/Glute,	following:	following:	Shoulder/Glute
13, 14 and 15)	bar placement,	Shoulder/Glute( )	Shoulder/Glute( )	Bar Placement
	proper grip,	Bar Placement ( )	Bar Placement ( )	Proper Grip
	valsava,	Proper Grip ( )	Proper Grip ( )	Valsava
	Breath pattern,	Valsava ( )	Valsava ( )	Breath Pattern
	Proper racking	Breath Pattern ( )	Breath Pattern ( )	Proper racking
		Proper racking ()	Proper racking ()	
		PLEASE Check	PLEASE Check	
		any/all areas that	any/all areas that	
		any/all areas that were NOT	any/all areas that were NOT	

2. Common Exam Component: Many of the courses will culminate in a required exam. At least a portion of the exam will consist of a set of questions selected from a pool of potential questions that are specific to that course. The pool of appropriate exam questions will be developed by the faculty who regularly teach the course and will cover the core knowledge in the courses necessary for mastery of sport study concepts. Questions of each exam are to be reflective and typical of national certification examinations.

The purpose of this measure is to assess Program Level Outcomes. This assessment will give the Master of Sport Studies Program Coordinator a comparison of outcomes across course sections and program years.

**3. Reflective Writing Assignments:** Each course in the Master of Sport Studies will require substantial writing assignments. Each writing assignment will measure specific components necessary in sport and wellness leadership graduate education. The faculty will develop the common writing components to be assessed. These assignments will be graded according to a rubric constructed by faculty who regularly teach the courses.

Depending on the specific course, writing assignments may assess the ability of students to think analytically, creatively or ethically about the concerns that perpetually face public school administrators. Furthermore, the assessments will measure student competencies in basic research and analysis as well as written communication skills. These measures will be scored according to a rubric developed by the faculty in accordance with the guidelines below. This will facilitate in the comparison of writing/communication skills across academic years and courses. The faculty will strive to make the writing assignments generally meet the following guidelines: organization, writing and content.

To enable data collection on the writing assignments, faculty who teach courses that contain elements tied to assessment measures will be asked to score the reflective writing assignments according to the following possible criteria: 5 = excellent, 4 = above average, 3 = average, 2 = below average, 1 = not acceptable. A rubric will be developed utilizing input from the education graduate faculty.

This data will be submitted to the Program Coordinator of the Master of Sport Studies for use in the Annual Report and National Recognition Process. This score is for program assessment only and will not be used as a measure of any student grades for assignments or courses.

## 4. Completion of Core Courses:

Each Masters of Sport Studies student is required to complete all of the courses in the curriculum as a means of developing their knowledge of the key concepts and analytical techniques in the discipline of Sport Studies. Successful completion of each of these courses indicates the graduate student's continued development towards competency in sport and fitness leadership. Tracking this allows the Program Coordinator/Assessment Manager to discover any problems with retention and timely program completion.

## 5. Student Feedback:

Every student will be surveyed while enrolled in the Master of Sport Studies program and through an exit interview. The information collected will be used to gather vital data regarding the program's ability to serve the needs of the students, particularly course offerings, program instruction/faculty, and demographic data. This will enable the Program Coordinator to track the needs and information over time.

## 6. Candidate Disposition Assessment Survey:

Candidates in HHP 650 Internship will compile a log of hours spent with their mentor and in the learning activities. At the end of the internship, the Mentor will complete an assessment of the Candidate's performance including personal dispositions. This will mirror evaluative measures used in the WVSU undergraduate program.

## 7. Alumni Survey:

A major survey of alumni will take place each fifth year. The survey will provide the Program Coordinator with information about the ability of the curriculum to prepare students for the workforce placement and success. Moreover, it will inform the Program Coordinator of the strengths and weakness of the program and historical information concerning job placement and history.

## 8. Employer Survey:

A major survey of employers will take place each fifth year. The survey will provide the Program Coordinator with alternative information from the alumni survey about the ability of the curriculum to prepare students for the workforce. Moreover, it will also inform the Program Coordinator of the strengths and weaknesses of the program from the employer's perspective. This survey is essential for understanding the impact the Master of Sport Studies program, its specificity to fairness and equity, will have on the community.

#### 9. Annual Faculty Review:

All faculty who participate in the Master of Sport Studies program must prepare a document that highlights the work they have done for the academic year. As per University standards, teaching, service and scholarship will be used to assess faculty contributions to the graduate program. This will be sent to the Program Coordinator for use in the Annual Report and the accreditation process.

#### b) Accreditation Status (§133-11-6.5b)

Once the West Virginia Higher Education Policy Commission approves the Master of Science in Sport Studies degree program, the institution will seek approval from the NSCA for program national recognition within the NSCA's Education Recognition Program. The Program Coordinator will seek national recognition in both the areas of strength and conditioning and personal training. WVSU must seek recognition to remain a viable, relevant and competitive program.

Appendices

Appendix I Graduate Program Survey Data If you were looking for Graduate Education in the field of Sport Studies or Wellness, and such a program was offered at WVSU, would you consider WVSU for your education?

Answer Choices -	Responses –
-	93.24 percent
Yes	69
-	2.70 percent
No	2
-	4.05 percent
Maybe	3
-	
What method of delivery would you prefe	r such a graduate program of Sport Studies to be administered?
	r such a graduate program of Sport Studies to be administered? ver Choices – Responses –
	ver Choices – Responses –
- Ans	ver Choices – Responses – 27.40 percent

Blended Mix of Online Learning and In Class Meetings Total

Do you believe a Master of Science Degree in Sport Studies is needed for state and regional educators, coaches and fitness professionals?

	Answer Choices –	Responses –
-		86.49 percent
Yes		64
-		4.05 percent
No		3
-		9.46 percent
Indifferent		7
Total		74

Do you believe a Master of Science in Sport Studies would enhance the recruitment of students to WVSU?

			-
	Answer Choices –		Responses –
-		93.24 percent	
Yes		69	
-		0.00 percent	
No		0	
-		6.76 percent	
Indifferent		5	
Total		74	

Do you believe a Master of Science in Sport Studies would enhance other programs on campus (i.e. athle	etics,
student government, campus life, etc.?)	

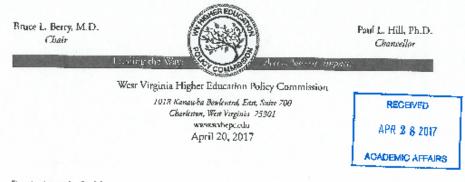
Answer Choices –	Responses –
-	90.54 percent
Yes	67
-	1.35 percent
No	1
-	8.11 percent
Indifferent	6
Total	74

68.49 percent

50

73

Appendix IV West Virginia Higher Education Policy Commission Intent to Plan Approval Letter



Dr. Anthony L. Jenkins President West Virginia State University Post Office Box 1000 Campus Box 399 Institute, WV 25112

#### Dear President Jenkins:

I approve the request from West Virginia State University to initiate the development of the following programs:

- > Bachelor of Science in Engineering with a major in Chemical Engineering
- Master of Science in Sports Studies
- Master of Science in Computer Science

The proposals for implementation should be prepared in accordance with the language and provisions of Series 11, Submission of Proposals for New Academic Programs at Public Regional Institutions and the Monitoring and Discontinuance of Existing Programs. While the proposals will need to address the appropriate elements of Series 11, 1 encourage you to closely examine the institutional commitment that will be required to position the necessary resources, both human and linancial, to support and sustain the proposed programs.

Addressing these issues will facilitate the finitly review of your program proposals, once submitted. If you have questions or need assistance, please contact the Academic Affairs Office.

Sincerely Paul L. Hill

Paul L. Hill Chancellor

cc: Dr. Kumara Jayasuriya, Provost, West Virginia State University Mr. Tom Bennett, H. Chief of Staff, West Virginia State University Dr. Corley Dennison, III, Vice Chancellot for Academic Affairs, Commission

> CHANCELLOR'S OFFICE (304) 558-0699 phone \* (304) 558-1011 fax