



MEETING AGENDA

February 3, 2017

Bruce Berry, MD, Chair

Michael J. Farrell, Vice Chair

Kathy Eddy, CPA, Secretary

Jenny Allen

John Leon, MD

Andrew Payne

Gayle C. Manchin, Ex-Officio

Michael J. Martirano, Ed.D., Ex-Officio

Clarence Pennington, Ex-Officio

Paul Hill, Ph.D., Chancellor

Directions to the West Virginia **Regional Technology Park**

2000 Union Carbide Drive, South Charleston, West Virginia



Arriving from the **EAST** on I-64

(after leaving Charleston)

1. At I-64 exit 55, take Ramp (RIGHT) toward Kanawha Turnpike
2. Stay on Kanawha Turnpike [CR-12]
3. After about 0.5 mile, turn LEFT into the West Virginia Regional Technology Park (3300 Kanawha Turnpike)
4. Proceed to Building 2000

Arriving from the **WEST** on I-64

(approaching Charleston):

1. At I-64 exit 54, turn RIGHT onto Ramp towards US-60 / MacCorkle Ave / South Charleston
2. Keep RIGHT to stay on Ramp towards US-60
3. Bear RIGHT (East) onto US-60 [MacCorkle Ave SW], then immediately turn RIGHT (South-East) onto SR-601 [Jefferson Rd]
4. After 0.5 mile, bear left at the traffic light onto Kanawha Turnpike [CR-12]
5. Continue straight (0.1 mile) through the next traffic light on Kanawha Turnpike
6. After about 0.5 mile, turn RIGHT into the West Virginia Regional Technology Park (3300 Kanawha Turnpike)
7. Proceed to Building 2000

WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION MEETING

February 3, 2017 | 9:00 a.m. | West Virginia Regional Technology Park
or by conference call*

AGENDA

- I. **Call to Order**
- II. **Approval of Minutes (Pages 5-15)**
- III. **Chairman's Report**
- IV. **Chancellor's Report**
- V. **Council of Presidents' Report**
- VI. **Updates from Constituent Groups**
 - A. Advisory Council of Classified Employees
 - B. Advisory Council of Faculty
 - C. Advisory Council of Students
- VII. **Access**
 - A. Presentation of 2016 Financial Aid Comprehensive Report **(Pages 16-23)**
 - B. Approval of Fiscal Year 2018 Distribution Plan for the West Virginia Higher Education Grant Program **(Pages 23-24)**
 - C. Approval of Annual Award Amount and Summer Awards for the PROMISE Scholarship Program **(Pages 25-27)**
 - D. Approval of the Bachelor of Science in Engineering Science **(Pages 28-84)**
 - E. Approval of the Master of Arts in Clinical Psychology **(Pages 85-150)**
 - F. Approval of the Master of Science in Dental Hygiene **(Pages 151-183)**
- VIII. **Success**
 - A. Follow-up Program Review Graduation Hours **(Pages 184-185)**
 - B. Statewide College Access and Success Initiatives Report **(Pages 186-191)**
- IX. **Impact**
 - A. Presentation of 2016 Higher Education Report Card **(Pages 192-194)**
 - B. Presentation of 2016 Health Sciences and Rural Health Report Card **(Pages 195-196)**
- X. **Approval of 2016 Institutional Compact Updates (Pages 197-241)**
- XI. **Report on West Virginia Business College Accreditation and Financial Issues (Pages 242-243)**

XII. Determination of Institutional Eligibility for the West Virginia Higher Education Grant Program (Pages 244-245)

XIII. Possible Executive Session under the Authority of West Virginia Code §6-9A-4 to Discuss Personnel Issues

- A. Approval of President Employment Agreement Addendum at West Virginia School of Osteopathic Medicine

XIV. Additional Board Action and Comment

XV. Adjournment

**To join by conference call, dial 866-453-5550 and enter the participant code 5245480#.*

DRAFT MINUTES

WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION WORK SESSION

November 14, 2016

I. Call to Order

Chairman Bruce Berry convened a work session of the Higher Education Policy Commission at 3:30 p.m. in the Ninth Floor Conference Room at 1018 Kanawha Boulevard, East, Charleston, West Virginia, and by conference call. The following Commission members were present: Bruce Berry and Michael Farrell.

II. Review of November 18, 2016 Agenda

Commission staff provided a brief overview of the items on the agenda for the November 18, 2016 meeting.

Chairman Berry requested clarification regarding the current exclusion of college courses earned at the high school level for the Promise Scholarship. Additionally, the Chair asked that detail information be provided regarding the return of the unused portion of the scholarship when a recipient terminates enrollment; such as who supervises the return and the timeframe allowed.

Regarding revisions to Series, 42, Chairman Berry requested that information be provided regarding the source of funds for the bonus given to students who complete a higher number of credit hours, and the reason for bonuses not being awarded on all cycles.

Considering the revisions to Series 25, Chairman Berry requested information regarding the length of time before a foreign national can claim in-state residency for tuition purposes.

III. Adjournment

There being no further business, the meeting was adjourned.

Bruce L. Berry, Chairman

Kathy Eddy, Secretary

DRAFT MINUTES

WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

November 18, 2016

I. Call to Order

Chairman Bruce Berry convened a meeting of the Higher Education Policy Commission at 9:00 a.m. in the David K. Hendrickson Conference Center of the West Virginia Regional Technology Park, 2000 Union Carbide Drive, South Charleston, West Virginia. The following Commissioners were present: Jenny Allen, Bruce Berry, Kathy Eddy, Michael Farrell, Kay Goodwin, and Andrew Payne. Absent were: Commissioners John Leon, Michael Martirano, and Clarence Pennington. Also in attendance were institutional presidents, higher education staff, and others.

II. Approval of Minutes

Commissioner Goodwin moved to approve the minutes of the meetings held on July 12, July 18, and October 31, 2016. Commissioner Farrell seconded the motion. Motion passed.

III. Chairman's Report

Chairman Berry welcomed Commission members and the audience to the meeting. He paid tribute to Commissioner Kay Goodwin, who is retiring as Cabinet Secretary of Education and the Arts. Dr. Berry praised Secretary Goodwin for her indefatigable commitment to students, and her many endeavors on behalf of all West Virginians. He presented her with a resolution and memento from the Commission.

IV. Chancellor's Report

Dr. Paul Hill, Chancellor, echoed the words of Chairman Berry and thanked Secretary Goodwin for her service to education, saying that she was instrumental in the creation of the EPSCoR initiative and the PROMISE Scholarship. Chancellor Hill reported on recent activities hosted by the Commission office including the GEAR UP Student Leadership Academy, College Application and Exploration Week, Compact Con, Co-Requisite Developmental Education Academy, and the Erma Byrd Higher Education Center Job Fair. Chancellor Hill stated that since October 1, the FAFSA and state-level scholarships are available for filing. He briefed the Commissioners on the status of Commission initiatives 15 to Finish Campaign and the 5 Star Challenge, and proceeded to highlight the findings of the Higher Education to Work report, the Economic Impact of Higher Education in West Virginia Study, and the Annual Open Doors Report. Dr. Hill commented that higher education faces a tough budget during the coming fiscal year.

V. Council of Presidents' Report

Dr. Kendra Boggess, President of Concord University and Chair of the Council of Presidents, reported on the strong commitment of the presidents to diversity in their institutions; the challenges campuses face with the implementation of OASIS, which continues to demand extra staff time and effort; and the effects the budgetary cuts will have on areas such as admissions and housing. President Boggess stated that all presidents are determined to work together in the upcoming legislative session, striving to educate new legislators regarding their institutions and issues affecting the higher education community. Dr. Boggess reiterated that closing institutions is not the answer to alleviate budgetary constraints.

VI. Annual Reports from Constituent Groups

A. Advisory Council of Classified Employees

Ms. Amy Pitzer, Chair of the Advisory Council of Classified Employees, briefed the Commission on issues of concern to classified employees statewide. She urged the Commissioners to offer support and advocate for the staff at the legislative level regarding the devastating effect that proposed changes to PEIA will have on employees and retirees. Ms. Pitzer asked the Commission to work on a policy to guide the institutional boards of governors with drafting policies in regards to furloughs. She further asked that furloughs not be directed solely to classified staff.

B. Advisory Council of Faculty

Dr. Marybeth Beller, Vice Chair of the Advisory Council of Faculty, briefed the Commission on statewide faculty matters. She reported on the substantial contributions of faculty over the last decade. Dr. Beller asked the Commission to assist with the coordination of training for institutional administrators in the rights and ethical treatment of faculty. She stated that it is essential to include faculty in the decision-making process of drafting policies and initiatives. Dr. Beller emphasized the need to graduate students with diversified skills and to look for sources of funding as state appropriations for higher education continue to dwindle. She thanked the Commission for promoting collaboration among all institutions and for encouraging all constituencies to be a part of the process.

C. Advisory Council of Students

Mr. William Bell, Chair of the Advisory Council of Students, gave a briefing on the Council's history and mission. He update the Commissioners on issues of concern to students statewide including the possible closure of institutions, elimination of particular programs of study, cuts to financial aid, the quality and variety of courses offered, and the lack of student engagement. Mr. Bell suggested working together with the Governor and Legislature to find additional funding for higher education.

VII. Access

A. Approval of Revisions to Series 7, Legislative Rule, West Virginia Providing Real Opportunities for Maximizing In-State Excellence (Promise) Scholarship Program

Mr. Brian Weingart, Senior Director of Financial Aid, proceeded to highlight the revisions to Series 7.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 7, Legislative Rule, West Virginia Providing Real Opportunities for Maximizing In-State Excellence (PROMISE) Scholarship Program, to be filed with the Secretary of State for the thirty-day public comment period.

Further Resolved, That staff is instructed to forward the legislative rule to the Legislative Oversight Commission on Education Accountability for approval and further legislative action at the conclusion of the comment period if no substantive comments are received.

Commissioner Payne seconded the motion. Motion passed.

B. Approval of Revisions to Series 42, Legislative Rule, West Virginia Higher Education Grant Program

Mr. Weingart gave an overview of the proposed revisions to Series 42.

Commissioner Eddy moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 42, Legislative Rule, West Virginia Higher Education Grant Program, to be filed with the Secretary of State for the thirty-day public comment period.

Further Resolved, That staff is instructed to forward the legislative rule to the Legislative Oversight Commission on Education Accountability for approval and further legislative action at the conclusion of the comment period if no substantive comments are received.

Commissioner Farrell seconded the motion. Motion passed.

C. Approval of Series 11, Procedural Rule, Submission of Proposals for New Academic Programs at Public Regional Institutions and the Monitoring and Discontinuance of Existing Programs

Dr. Corley Dennison, Vice Chancellor for Academic Affairs, gave an overview of Series 11.

Commissioner Eddy moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves Series 11, Procedural Rule, Submission of Proposals for Academic Programs at Public Regional Institutions and the Monitoring and Discontinuance of Existing Programs for final filing with the Secretary of State.

Commissioner Farrell seconded the motion. Motion passed.

D. Approval of Revisions to Series 13, Procedural Rule, Change in the Organization of Colleges or Schools

Mr. Bruce Walker, General Counsel, gave an overview of the proposed revisions to Series 13.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 13, Procedural Rule, Change in the Organization of Colleges or Schools, to be filed with the Secretary of State for the thirty-day public comment period and if no substantive comments are received, that the Commission extends its final approval.

Commissioner Eddy seconded the motion. Motion passed.

E. Approval of Revisions to Series 25, Procedural Rule, Residency Classification for Admission and Fee Purposes

Vice Chancellor Dennison gave an overview of the proposed revisions to Series 25.

Commissioner Payne moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 25, Procedural Rule, Residency Classification for Admission and Fee Purposes, to be filed with the Secretary of State for the thirty-day public comment period and if no substantive comments are received, that the Commission extends its final approval.

Commissioner Farrell seconded the motion. Motion passed.

VIII. Success

A. Approval of Master of Science in Dental Hygiene Program

At the request of West Liberty University, action on the proposed Master of Science in Dental Hygiene Program has been delayed to a future Commission meeting.

B. Approval of Revisions to Series 52, Legislative Rule, Annual Reauthorization of Degree-Granting Institutions

Vice Chancellor Dennison gave an overview of the proposed revisions to Series 52.

Commissioner Eddy moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 52, Legislative Rule, Annual Reauthorization of Degree Granting Institutions, to be filed with the Secretary of State for the thirty-day public comment period.

Further Resolved, That staff is instructed to forward the legislative rule to the Legislative Oversight Commission on Education Accountability for approval and further legislative action at the conclusion of the comment period if no substantive comments are received.

Commissioner Farrell seconded the motion. Motion passed.

C. Report on Program Review

Vice Chancellor Dennison reported that in accordance with West Virginia Code §18B-1B-4 and §18B-2A-4 and Series 10, Procedural Rule, Policy Regarding Program Review, the institutions through their respective governing boards conducted reviews of academic programs for the 2015-2016 academic year and submitted summary reports that indicated actions taken. A total of 98 programs were reviewed during this program review cycle. Dr. Dennison explained in detail the results of the review.

IX. Impact

A. Approval of West Virginia State University Campus Development Plan

Action on the proposed campus development plan has been delayed to a future Commission meeting.

B. Report on Fall 2016 Enrollment

Dr. Neal Holly, Vice Chancellor for Policy and Planning, gave an overview of expected trend enrollment through fall 2016 for the state's public four-year institutions. He stated that the number of students aged 25 or older has decreased by 9.6 percent from the past year and 33.7 percent since 2011, as students who returned to school after the recession in 2008 have since

graduated or left their programs. The number of younger students enrolled in the state's public colleges has stayed steady for the past few years, but roughly 500 more were enrolled this year compared to last year. Final enrollment data is still in the process of being collected from the institutions and reviewed for accuracy. A report summary will be made available to the Commissioners as soon as it becomes available.

C. Master Plan and Compact Update

Vice Chancellor Holly gave a progress update on the system's master plan *Leading the Way: Access. Success. Impact*. The master plan is in its third year of implementation and has reached an important phase, as institutions will report progress concerning their ongoing strategies and plans this fall. In addition, Dr. Holly discussed the recent *Compact-Con* event the Commission hosted in Charleston which focused on increasing student success among adult learners.

X. Approval to Repeal Legislative and Procedural Rules

Chancellor Hill gave a summary of the proposed action.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the repeal of Title 133, Legislative Rules, Series 1 and Series 35.

Further Resolved, That the West Virginia Higher Education Policy Commission approves the repeal of Title 133, Procedural Rules, Series 24, Series 36, Series 37, Series 44, and Series 45.

Commissioner Payne seconded the motion. Motion passed.

XI. Report on 2015 Human Resources Report Card

Ms. Patricia Clay, Vice Chancellor for Human Resources, reported that West Virginia Code §18B-7-8(a)(2) requires the West Virginia Higher Education Policy Commission and West Virginia Council for Community and Technical College Education to prepare an annual *West Virginia Higher Education Human Resources Report Card*. The report card summarizes higher education human resources metrics, expenses, and compensation data by each college and university. It is designed to compare overall staffing, HR expenses and compensation data among each of the 19 public institutions. Ms. Clay highlighted particular areas of the report card.

XII. Approval of TIAA Retirement Plan Modifications

Vice Chancellor Clay gave an overview of the proposed modifications to the TIAA Retirement Plan.

Commissioner Eddy moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves modifications to the TIAA retirement plan as described and delegates to the Chancellor, in consultation with the Finance Committee, the authority to approve final changes.

Commissioner Farrell seconded the motion. Motion passed.

XIII. Approval of 2016 Research Trust Fund Annual Report

Dr. Jan Taylor, Director of Science and Research, highlighted key areas of the report and gave an overview of the proposed action.

Commissioner Payne moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the 2016 Research Trust Fund Annual Report and recommends submission to the Governor and the Legislature.

Commissioner Farrell seconded the motion. Motion passed.

XIV. Approval of Revisions to Series 48, Legislative Rule, Research Trust Fund Program

Dr. Taylor gave an overview of the proposed revisions to Series 48.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 48, Legislative Rule, Research Trust Fund, to be filed with the Secretary of State for the thirty-day public comment period.

Further Resolved, That staff is instructed to forward the legislative rule to the Legislative Oversight Commission on Education Accountability for approval and further legislative action at the conclusion of the comment period if no substantive comments are received.

Commissioner Eddy seconded the motion. Motion passed.

XV. Approval of Fiscal Year 2017 WVNET Budget

Mr. Matthew Turner, Vice Chancellor for Administration, gave an overview of WVNET's proposed budget for 2017.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the Fiscal Year 2017 West Virginia Network for Educational Telecomputing budget.

Commissioner Eddy seconded the motion. Motion passed.

XVI. Approval of Fiscal Year 2017 Capital Project Priorities

Mr. Jim King gave an overview of the proposed capital project priorities.

Commissioner Payne moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the prioritized capital project list for Fiscal Year 2017.

Commissioner Farrell seconded the motion. Motion passed.

XVII. Approval to Reallocate Series 2012 Bond Proceeds

Dr. Edward Magee, Vice Chancellor for Finance, gave an overview of the proposed reallocation of West Liberty University's Series 2012 bond proceeds.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the reallocation of West Liberty University's Series 2012 bond proceeds from the Health Sciences building to a project to upgrade the IT network infrastructure.

Commissioner Payne seconded the motion. Motion passed.

XVIII. Executive Session under the Authority of West Virginia Code §6-9A-4

Commissioner Eddy moved to convene in Executive Session under the authority of West Virginia Code §6-9A-4 to discuss personnel issues. Commissioner Farrell seconded the motion. Motion passed.

After deliberations, Commissioner Goodwin moved to raise from Executive Session. Commissioner Eddy seconded the motion. Motion passed.

Chairman Berry explained that no decisions were made or actions taken during Executive Session.

XIX. Additional Board Action and Comment

A. Approval of Presidential Contract at Concord University

Chancellor Hill gave an overview of the proposed action.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the Presidential Contract of Dr. Kendra Boggess as requested by the Concord University Board of Governors.

Commissioner Goodwin seconded the motion. Motion passed.

XX. Adjournment

There being no further business, Commissioner Goodwin moved to adjourn the meeting. Commissioner Eddy seconded the motion. Motion passed.

Bruce L. Berry, Chairman

Kathy Eddy, Secretary

DRAFT MINUTES

WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION SPECIAL MEETING

December 22, 2016

I. Call to Order

Chairman Bruce Berry convened a special meeting of the Higher Education Policy Commission at 3:00 p.m. in the Presidents' Conference Room at 1018 Kanawha Boulevard, East, Charleston, West Virginia and by conference call. The following Commission members attended: Jenny Allen, Bruce Berry, Kathy Eddy, Michael Farrell, Kay Goodwin, and John Leon. Also in attendance were Chancellor Paul Hill and staff members.

II. Approval of 2016 Shepherd University Bond Refunding

Commissioner Goodwin moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the 2016 Shepherd University bond refunding as submitted. If the final agreement requires additional conditions, they must be presented to the Chancellor who is hereby delegated the authority to approve the final documents.

Commissioner Farrell seconded the motion. Motion passed.

III. Additional Board Action and Comment

Chairman Berry announced the passing of Dr. James Rowley, former official who served as Interim Chancellor and held various higher education positions during his career.

IV. Adjournment

There being no further business, Commissioner Goodwin moved to adjourn the meeting. Commissioner Allen seconded the motion. Motion passed.

Bruce L. Berry, Chairman

Kathy Eddy, Secretary

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Presentation of 2016 Financial Aid Comprehensive Report

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Brian Weingart

BACKGROUND:

In accordance with West Virginia Code §18C-1-1e, this report represents the eighth annual Financial Aid Comprehensive Report. It contains (a) descriptions of and changes to West Virginia aid programs, (b) policy recommendations for West Virginia aid programs, and (c) longitudinal data about recipients of state financial aid and outcomes of these recipients. The Financial Aid Comprehensive Report along with its two supplements on institutional aid at public institutions, and federal aid and student loans, together provide a comprehensive view of the principal sources of financial aid at West Virginia colleges and universities. It should be noted that the data presented are for the 2014-15 academic year; financial aid data for the 2015-16 academic year are currently being submitted by institutions and are not available at the time of publication.

Changes in West Virginia

The Higher Education Student Financial Aid Advisory Board met twice in 2014-15 and made recommendations to the Commission regarding the academic criteria necessary to receive the Providing Real Opportunities to Maximize In-State Student Excellence (PROMISE) Scholarship, the PROMISE award amount, and the Higher Education Grant Program (HEGP) award structure. The Commission expanded statewide a 2013-14 pilot project to share with public high schools student-level Free Application for Federal Student Aid (FAFSA) completion data in 2014-15 known as the FAFSA Data Share. This initiative allows authorized personnel in public high schools to provide direct assistance and counseling to those students who have not filed the FAFSA. During 2015-16, additional high schools were signed up to use the FAFSA Data Share and counselors were trained on how to utilize this new tool.

The PROMISE Scholarship has enjoyed several years of stability with the academic criteria necessary to receive the award having not changed since 2007-08. However, the future fiscal outlook of the state requires the Higher Education Student Financial Aid Advisory Board to review policy options going forward.

The HEGP has been able to increase the maximum award over the last four years from

\$2,100 in 2010-11 to \$2,600 in 2015-16. While this is still below the maximum award amount of \$3,300 in 2009-10, the HEGP has been able to serve almost twice as many students each year since the award amount was decreased. For 2014-15, the HEGP was able to serve students with an Expected Family Contribution (EFC) of up to \$10,000. There was also a five percent allocation for non-traditional first-time HEGP recipients, namely adults 25 years and older who filed their FAFSA by July 1, with a secondary deadline of July 31. The five percent allocation was able to serve all of the non-traditional students who met these criteria. The HEGP has been able to increase the award amount and serve more students because the Legislature appropriated an additional \$4 million for the 2011-12 academic year and maintained that funding through the 2015-16 academic year. State financial aid programs have been held harmless amid several years of state budget cuts.

In May 2015, the U.S. Department of Education changed the way students sign the FAFSA from the FSA PIN to a FSA username and password. Consequently, a number of students and parents experienced difficulty digitally signing the FAFSA, resulting in a three-fold increase in the number of incomplete FAFSA applications. In response, the Commission increased its outreach services in 2015-16 by conducting more financial aid nights and FAFSA workshops to help families with the financial aid process and prepare families for Early FAFSA, as the FAFSA for 2017-18 became available 3 months earlier on October 1, 2016.

Data Highlights

PROMISE Scholarship Program

- The number of PROMISE recipients increased from 9,782 in 2010-11 to 10,094 in 2014-15.
- The total cost of the program decreased from \$47 million in 2010-11 to \$45.7 million in 2014-15. Although the \$4,750 block award was implemented on January 1, 2010 for new scholars, pre-existing scholars still received full tuition and fees in 2010-11, 2011-12, and 2012-13. From 2013-14, all scholars were subject to the new block award.
- Approximately 87 percent of PROMISE recipients in 2014-15 attended four-year public institutions. Of these, most attended either West Virginia University (43.8 percent) or Marshall University (18.9 percent).
- The proportion of enrollment at four-year public colleges and universities that is made up of PROMISE scholars has increased to a five-year high of 22.5 percent in 2014-15. West Virginia University's proportion of PROMISE scholar enrollment was the highest in the system in 2014-15 with 37.7 percent. Other schools where PROMISE scholars made up a large proportion of students were Marshall University (23.4 percent) and West Liberty University (20.7 percent).

- The four-year public institution with the highest share of its first-time freshmen being PROMISE scholars in 2014-15 was West Virginia University with 60.6 percent. The two-year public institution with the highest share was West Virginia University at Parkersburg with 5.1 percent.
- The proportion of first-year students who were PROMISE scholars at four-year public institutions increased from 34.7 percent in 2010-11 to 39.5 percent in 2014-15. In the same time period, ten four-year public institutions saw an increase in the share of their first-year students who were PROMISE scholars (Bluefield State College, Fairmont State University, Glenville State College, Marshall University, Potomac State College of West Virginia University, Shepherd University, West Liberty University, West Virginia State University, West Virginia University, and West Virginia University Institute of Technology) while the others experienced declines.
- In 2014-15, the share of incoming freshmen PROMISE scholars with family adjusted gross income of less than \$30,000 was 15 percent. Approximately 18.6 percent had a family income of \$30,000 to \$59,999, while 21.6 percent had income of \$60,000 to \$89,999, 19.2 percent had income of \$90,000 to \$119,999, and 25.7 had income of \$120,000 or more.
- The percentage of students receiving both PROMISE and the Higher Education Grant has increased from 33.8 percent in 2010-11 to 39.1 percent in 2014-15.
- The proportion of PROMISE scholars who keep the scholarship into the fall semester following their initial freshman enrollment was 79.8 percent for the 2010-11 fall cohort and has risen since then to 81.8 percent for the 2014-15 fall cohort.
- The proportion of first-time, full-time PROMISE scholars who graduate within four years ranged from 46.5 to 48.2 percent from 2008 to 2012. This is considerably higher than the rates for all first-time, full-time freshmen, which increased from 25.2 to 27.6 percent during the same period.

Higher Education Grant Program

- The number of HEGP recipients decreased each year during the five-year period, from 20,791 in 2010-11 to 18,348 in 2014-15.
- The total amount awarded increased from \$37.1 million in 2010-11 to \$40.5 million in 2014-15, an increase of 9.1 percent.
- The average HEGP award increased from \$1,786 in 2010-11 to \$2,208 in 2014-15.

- In 2014-15, 65.1 percent of HEGP recipients attended four-year public institutions. Of these, most students attended either West Virginia University (18.2 percent) or Marshall University (14.9 percent).
- The proportion of enrollment at four-year public colleges and universities that is made up of HEGP awardees increased from 28.4 in 2010-11 to 31.0 percent in 2014-15. The institutions with the highest proportion of students who were HEGP awardees in 2014-15 were Concord University (36.9 percent), Fairmont State University (36.9 percent), and West Liberty University (34.7 percent).
- The proportion of in-state first-time freshmen that were HEGP recipients at four-year public institutions increased from 41.1 percent in 2010-11 to 47.1 percent in 2014-15. Potomac State College of West Virginia University had the highest share of HEGP recipients among its first-year students (54.9 percent) in 2014-15.
- Nearly three-fourths (72.7 percent) of first-time recipients in 2014-15 were freshmen; this was appreciably higher than the 65.4 percent figure in 2010-11. This was due to the elimination of the separate state application for the program in 2009-10. All students who filed a FAFSA claiming West Virginia residency, had an eligible Expected Family Contribution (EFC), and designated an eligible institution were awarded. Needing only a FAFSA for eligibility makes it less likely that a student will receive the award for the first time after their freshman year.
- In 2014-15, the share of all HEGP recipients with family adjusted gross income of less than \$30,000 was 51.8 percent. Another 28.9 percent had family income of \$30,000 to \$59,999; 15.8 percent had income of \$60,000 to \$89,999; 3.2 percent had income of \$90,000 to \$119,999; and 0.3 percent had income of \$120,000 or more.
- Compared to 2010-11, the proportion of students in the two lowest income brackets have declined while the proportion in the highest income brackets have increased.
- The proportion of HEGP recipients who maintained the grant into the fall semester following their initial freshman enrollment was 47.9 percent for the 2010-11 fall cohort and increased to 52.6 percent for the 2014-15 fall cohort.
- The proportion of first-time, full-time HEGP recipients that graduated with a bachelor's degree within four years increased from 17.7 percent for the fall 2008 cohort to 23.3 percent for the 2012 cohort. Rates for all students increased from 25.2 percent to 27.6 percent during the same period.

Higher Education Adult Part-Time Student (HEAPS) Grant Program

- The number of HEAPS recipients decreased from 3,273 in 2010-11 to 3,057 in 2014-15.

- The total amount of awards was approximately \$3.1 million in 2014-15, an increase of 6.3 percent over the roughly \$2.9 million disbursed in 2010-11.
- The average award increased from \$895 in 2010-11 to \$1,019 in 2014-15.
- In 2014-15, 39.5 percent of HEAPS Part-Time Enrollment Component recipients were enrolled at four-year public institutions; 51.4 percent at two-year public institutions; 1.6 percent at independent, non-profit institutions; and 7.5 percent at public vocational/technical centers.
- The institution with the largest share among four-year public institutions (besides West Virginia University whose total includes Potomac State College and WVU Institute of Technology) was Marshall University with 12.5 percent.
- Over half of 2014-15 HEAPS recipients (58.3 percent) earned \$20,000 or less. About 21 percent earned between \$20,000 and \$40,000, while 20.5 percent earned over \$40,000. From 2010-11 to 2014-15, the proportion making \$40,000 or less has declined slightly while the proportion making more than \$40,000 has increased slightly.
- About 21.4 percent of HEAPS recipients received awards of \$500 or less in 2014-15, while 17.5 percent received awards of \$501 to \$750, 22.9 percent received awards of \$751 to \$1,000, and 20.2 percent received awards of \$1,001 to \$1,500. About 18.1 percent received awards over \$1,500.
- Less than half of students (47.4 percent) in the HEAPS program in 2014-15 were seeking an associate's degree. The second most popular credential sought was a bachelor's degree by 40.3 percent of recipients. Students seeking certificates accounted for 12.4 percent of recipients.

Underwood-Smith Teacher Scholarship

- The number of Underwood-Smith Teacher Scholarship recipients has declined from 35 in 2010-11 to 27 in 2014-15.
- The total amount of awards has decreased from \$158,354 in 2010-11 to \$117,500 in 2014-15.
- The average award in 2014-15 was \$4,352, a 3.8 percent decrease from the 2010-11 average of \$4,524.
- The largest number of Underwood-Smith recipients attended Glenville State College in 2014-15.

- Females made up 92.7 percent of Underwood-Smith recipients in 2014-15, a share that has remained high since 2010-11.
- Out of the total 94 new Underwood-Smith recipients from 2010 to 2014, 22.3 percent have canceled their obligation through teaching. An additional 56.4 percent are currently working to cancel their obligation through teaching.

Engineering, Science and Technology Scholarship

- The number of recipients increased slightly from 181 in 2010-11 to 190 in 2014-15.
- The total amount of awards increased from \$500,926 in 2010-11 to \$538,644 in 2014-15.
- The average award increased from \$2,768 to \$2,835.
- The largest numbers of Engineering, Science and Technology Scholarship recipients have historically come from Marshall University, West Virginia University, and WVU Institute of Technology.
- In 2014-15, the percentage of Engineering, Science and Technology Scholarship recipients who were female was 27.9 percent. This figure has increased from the 2010-11 figure of 24.9 percent.
- Out of the 378 new Engineering, Science and Technology Scholarship recipients from 2010 to 2014, about 7.9 percent have met their obligations through in-state employment.

Medical Student Loan Program

- The number of recipients from 2010-11 to 2014-15 fluctuated with the high mark of 273 in 2012-13 and a low of 224 in 2010-11.
- The Medical Student Loan Program disbursed approximately \$1.5 million in 2014-15, compared to \$1.4 million in 2010-11.
- The default rate on previous awards declined from 2.6 percent in 2010-11 to 2.5 percent in 2014-15.

Nursing Scholarship Program

- The Nursing Scholarship Program awarded a total of 60 scholarships to nursing students at all levels during the 2014-15 academic year. The program disbursed a total of \$164,821 in scholarship aid during this period.

- During the 2014-15 academic year, 17 registered nursing students received a total of \$73,881 in aid through the Nursing Scholarship Program. This represents an average award of \$4,346.
- Sixteen students at the master's or doctoral level received a total of \$63,940 in scholarship funds during the 2014-15 academic year, with an average award of \$3,996.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Approval of Fiscal Year 2018 Distribution Plan for the West Virginia Higher Education Grant Program

INSTITUTIONS: All

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the proposed Fiscal Year 2018 Distribution Plan for the West Virginia Higher Education Grant Program.

STAFF MEMBER: Brian Weingart

BACKGROUND:

The West Virginia Higher Education Grant Program (HEGP), the state's long-standing need-based financial aid program, provides opportunities for full-time, undergraduate students with demonstrated financial need to pursue a postsecondary education at qualified institutions. Modifications to Series 42, the legislative rule that regulates the program, have provided staff with policy latitude to determine award distribution frameworks.

Student financial aid has been protected from state budget cuts through a commitment from the Governor, the Legislature, and the Commission so that higher education can be affordable for West Virginia students. The following provides an overview of the proposed distribution plan for the 2017-18 academic year.

Revenue

The HEGP receives funding from multiple sources including general revenue, Higher Education Resource Assessment (HERA) allocations, and carry forward balances. Fiscal Year (FY) 2018 funding, not including carry forward, should total just over \$39 million:

- *State Appropriation* - \$39,019,864. The Legislature appropriates funds annually directly to the Higher Education Grant Program. The estimated FY 2018 appropriation is the same as the FY 2017 appropriation.
- *Higher Education Resource Assessment (HERA)* - \$1,600,000. West Virginia Code §18B-10-2(d) requires the Commission and the Council to allocate a portion of its HERA for financially needy students. Historically, the Commission and the Council have allocated funds annually to the HEGP to satisfy that requirement. Because the HERA

applies only to students attending public institutions of higher education, it will be used exclusively for traditional prospective students and renewal students at those institutions.

Based upon current projections, funding may be used to maintain current awarding criteria.

Proposed FY 2018 Higher Education Grant Program Funding Summary

	Budget Presented to Higher Education Student Financial Aid Advisory Board
State Appropriations	\$39,019,864
3% Administrative Allowance	(\$1,170,596)
HERA Funding	\$1,600,000
Estimated Carry Forward	\$3,854,783
Total	\$43,304,052

Staff proposes to continue this basic process during the 2017-18 year to provide one award level to the small proportion of awardees with an Expected Family Contribution (EFC) above 5,328 in order to simplify the award process for institutions. An EFC of 5,328 has been selected because it is the maximum EFC for Pell Grant eligibility for the 2017-2018 award year. The Higher Education Student Financial Aid Advisory Board recommends an award amount for students 5,328 and below and another award amount for students with an EFC of 5,329 to 10,000. The maximum EFC for eligibility is being set at 10,000 in order provide the ability to award as many needy students as possible should funds be available.

Non-Traditional Students (adults over the age of 25).

Application deadlines that occur well before the beginning of an academic year negatively impact the participation rate of non-traditional students, especially since a deadline is not part of the federal financial aid application process. To provide greater programmatic access and to increase adult college participation rates, staff proposes for the 2017-18 academic year a priority application date of July 1, 2017 for:

- 1) Students 25 years of age or older,
- 2) Students who have not previously received the Higher Education Grant, and
- 3) Have an EFC under 10,000.

Staff proposes a secondary application deadline of July 31, 2017 for the late filing non – traditional population if funding allows, to better utilize the funding that is set aside for this subgroup.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Approval of Annual Award Amount and Summer Awards for the PROMISE Scholarship Program

INSTITUTIONS: All

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the annual award amount and summer awards for the PROMISE Scholarship Program.

STAFF MEMBER: Brian Weingart

BACKGROUND:

The PROMISE Scholarship is a merit-based financial aid program for West Virginia residents. Students who achieve certain academic goals are eligible to receive annual awards to help offset the cost of tuition and mandatory fees at public or independent institutions in West Virginia.

Annual Award Amount

Due to the current budget projections for the state, staff proposes to maintain the award level for the 2017-18 academic year at the lesser of tuition and mandatory fees, or \$4,750 annually. Staff also recommends that the Higher Education Student Financial Aid Advisory Board continue to closely monitor the program so costs do not exceed available funds. Staff recommends these options not be limited merely to changing qualification criteria but also include other policy changes that may help the PROMISE program work to further other financial aid and educational goals of the state. However, if there are additional budget cuts, it may be necessary to increase the qualification criteria to receive a PROMISE Scholarship.

Summer Awards

The PROMISE Scholarship Program provides summer school awards for eligible students. Summer awards were initially offered during Summer 2010. Student acceptance of a summer award counts toward the maximum eight semesters of eligibility with priority given to students who can utilize the summer term to graduate by year's end. Below is a chart of PROMISE summer school awards. Staff proposes to allocate \$200,000 for the summer of 2017.

Year	Recipients	Average Award	Total Awards
2010	46	\$2,210	\$101,639
2011	72	\$2,142	\$154,233
2012	74	\$1,940	\$143,530
2013	83	\$2,103	\$174,572
2014	78	\$2,057	\$160,449
2015	86	\$2,095	\$180,186
2016	99	\$2,128	\$210,658

PROMISE Scholarship Cost Projections

The following table provides projections through Fiscal Year (FY) 2021 based on the following parameters:

- Annual funding has been constant at \$47.5 million beginning in FY 2012.
- Scholars who began enrollment after January 1, 2010 are eligible to receive the lesser of \$4,750 or full tuition and fees.
- The projected number of students qualifying for and accepting PROMISE as well as their choice of institution and retention levels are based on historical data.

Table 1
 PROMISE Scholarship Program Budgetary Projections FY 2017 through 2021

Fiscal Year 2017			
Revenue		Expenditures	
Statutory Transfers	\$47,500,000	Administrative Costs	\$682,952
Investment Earnings	\$2,383	Scholarships	\$47,519,692
Total Revenue	\$47,502,383	Total Expenses	\$48,202,644
Carry Forward	\$2,748,393		
Total Assets	\$50,250,775	Ending Balance	\$2,048,131
		(06/30/2017)	
Fiscal Year 2018			
Revenue		Expenditures	
Statutory Transfers	\$47,500,000	Administrative Costs	\$710,270
Investment Earnings	\$2,383	Scholarships	\$47,740,664
Total Revenue	\$47,502,383	Total Expenses	\$48,450,935
Carry Forward	\$2,048,131		
Total Assets	\$49,550,514	Ending Balance	\$1,099,579
		(06/30/2018)	
Fiscal Year 2019			
Revenue		Expenditures	
Statutory Transfers	\$47,500,000	Administrative Costs	\$738,681
Investment Earnings	\$2,383	Scholarships	\$48,151,879
Total Revenue	\$47,502,383	Total Expenses	\$48,890,560
Carry Forward	\$1,099,579		
Total Assets	\$48,601,962	Ending Balance	(\$288,599)
		(06/30/2019)	
Fiscal Year 2020			
Revenue		Expenditures	
Statutory Transfers	\$47,500,000	Administrative Costs	\$768,228.57
Investment Earnings	\$2,383	Scholarships	\$47,492,638
Total Revenue	\$47,502,383	Total Expenses	\$48,260,867
Carry Forward	(\$288,599)		
Total Assets	\$47,213,784	Ending Balance	(\$1,047,083)
		(06/30/2020)	
Fiscal Year 2021			
Revenue		Expenditures	
Statutory Transfers	\$47,500,000	Administrative Costs	\$798,957.71
Investment Earnings	\$2,383	Scholarships	\$46,952,215
Total Revenue	\$47,502,383	Total Expenses	\$47,751,172
Carry Forward	(\$1,047,083)		
Total Assets	\$46,455,299	Ending Balance	(\$1,295,873)
		(06/30/2020)	

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Approval of the Bachelor of Science in Engineering Science

INSTITUTION: Shepherd University

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the Bachelor of Science in Engineering Science program at Shepherd University for implementation in fall 2017. This approval expires two years from the date of Commission approval if the program is not fully implemented at that time.

STAFF MEMBER: Corley Dennison

BACKGROUND:

Shepherd University's Bachelor of Science, Engineering Science program is a 120-credit hour comprehensive, interdisciplinary major with two concentrations, Systems Engineering and Environmental Engineering. In addition to engineering courses, students also take courses in linear algebra, operations research, math modeling and numerical analysis, plus physics, thermodynamics, electromagnetic fields, statics and dynamics, computer engineering, computer sciences and linear systems. All students are required to complete a 42-credit hour core.

Students are also to be provided with multiple lab experiences and a capstone course with an emphasis on undergraduate research. The senior capstone is to be an individual project that conforms to department guidelines for faculty mentored undergraduate research and is expected to result in a publication or presentation at a professional conference.

Growth in job demand is expected well into the next decade. Due to population growth in the eastern United States and an expected wave of retirements in the field, job growth in environmental engineering is expected to increase 10 percent in the coming decade while job growth for systems engineers is projected to increase by 21 percent.

The Bachelor of Science in Engineering Science program is to be housed in the Department of Computer Science, Mathematics and Engineering (CME) under the College of Natural Sciences and Mathematics. Shepherd University is not seeking new financial support for implementing the program as it will be supported by tuition revenue,

lab fees and institutional budget. As the program develops, the program will seek an additional faculty line.

Faculty credentials, library resources, instructional materials and support services are more than adequate for the program. The department has two engineering labs, a math lab and multiple software programs necessary for the program. Enrollment estimates are for 12 students in the first year, growing to 15 in the second year and then stabilizing at 30 students.

It is an aspirational goal of the program to receive accreditation by the Accreditation Board for Engineering and Technology (ABET). Assessment for the current program will be carried out under the guidelines of ABET. Faculty have attended ABET workshops and plan to attend the annual ABET Symposium this coming spring.

The following is recommended:

- The Bachelor of Science in Engineering Science program be approved for implementation in fall 2017.
- If the program is not fully implemented by February 2019, the program will no longer be considered approved by the West Virginia Higher Education Policy Commission and must be resubmitted for review and approval.
- In the 2020-2021 academic year, the Commission will conduct a post-audit review of the program to assess progress toward successful implementation.

Shepherd University

WV-HEPC Title 133, Series 11-6: New Program Proposal

Date:	December 2016
Category of Action:	Implementation Plan (Title 133-11-6)
Title of Degree:	Bachelor of Science, Engineering Science (B.S., ES)
Location:	Shepherd University, Shepherdstown, WV
Effective Date of Proposed Action:	Fall 2017

Shepherd University

Dr. Mary J.C. Hendrix, President

Dr. Christopher Ames, Provost

Dr. Colleen Nolan, Dean, School of Natural Sciences and Mathematics

Reza Mirdamadi, Chair, Department of Computer Science, Mathematics and Engineering

Dr. Scott Beard, Associate Provost

Shepherd University, B. S., Engineering Science

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Summary

Shepherd University is submitting a new program proposal (WV-HEPC Series 11) for a Bachelor of Science, Engineering Science (B.S., ES). The proposed, 120-credit comprehensive major is interdisciplinary in nature, and, is designed to provide students with exposure to rudimentary and advanced knowledge in engineering and the applied sciences. These highly desired areas include: applied mathematics, electronics, thermodynamics, linear systems, hydrodynamics, as well as computer engineering and computer sciences topics. The intent-to-plan proposal was approved by the Shepherd University Board of Governors on September 27, 2016 and by the Chancellor on October 19, 2016. Following approval of the implementation plan by the West Virginia Higher Education Policy Commission (WV-HEPC), the University would be poised to begin offering this comprehensive major in fall 2017.

6.2. Program Description

As stated in 6.2.a. under “educational objectives,” the proposed Engineering Science major is a 120-credit hour program designed to provide students with mastery in subjects that form the rudiments of engineering and the applied sciences. Please refer to this section for a more detailed description of the program. The program features two concentrations: Systems Engineering and Environmental Engineering. In addition to the required 42 credits of core curriculum courses, of which each concentration has some prescribed coursework, students in these concentrations take courses in mathematics, engineering, environmental science, computer information systems, and data analytics.

6.2.a. Program Objectives

The proposed Engineering Science major is a 120-credit hour program designed to provide students with mastery in subjects that form the rudiments of engineering and the applied sciences. This interdisciplinary degree program includes subject areas in applied mathematics including differential equations linear algebra, operations research, math modeling and numerical analysis. An integral part of the program includes core topics in engineering and physics: digital and analog electronics, thermodynamics, linear systems, electromagnetic fields, statics and dynamics, all of which are built on advanced mathematical concepts. The proposed comprehensive undergraduate major also encompasses computer engineering and computer sciences topics to provide students with the necessary knowledge and skills in embedded and control systems. These essential skills are highly desired and utilized in the field of robotics, both in hardware and software. Basic topics in management such as Economics and Principles of Management and courses in Computer Networking, as well as the liberal arts focus of Shepherd’s core curriculum are also included to provide a well-rounded experience for Shepherd’s undergraduate students.

High-impact educational practices identified by AAC& U (American Association of Colleges and Universities) are expected to play a prominent role in this program, specifically, entry-level and capstone courses, experiential learning, undergraduate research, and collaborative assignments. As with all courses at Shepherd, syllabi identify core competencies such as critical thinking, scientific inquiry, oral and written communication, life-long and integrative learning (See Appendix C-Course Syllabi).

These best practices include and will be augmented by the following:

- Lab experiences to expose students to connections between abstract concepts and real-world applications via design-oriented projects;
- In the capstone course, students are given an opportunity to specialize in a particular area in engineering and applied sciences. Faculty will mentor students on their projects, with the possibility of presentations/publications at professional conferences.
- With an emphasis on undergraduate research, we believe the proposed program in Engineering Science will serve as an excellent avenue for this high-impact practice.

The proposed Engineering Science program will have two concentrations, which are described in the following paragraphs:

Environmental Engineering

The environmental engineering concentration prepares students for careers in applying engineering technology to environmental issues and problems. The need for trained environmental engineers is clearly illustrated through the numerous employment opportunities available for individuals trained in this field, in industry or at state and federal agencies, and with environmental consulting firms. According to <https://collegegrad.com/>, prospects for employment should be favorable due to anticipated population growth, as well as a wave of retirements in that field. Moreover, the introduction of this program will serve to fulfill the recent call to attention by various civic and private groups like the Chamber of Commerce to increase the number of highly skilled workers in the Eastern Panhandle of West Virginia and the quad-state region.

There has been a great emphasis in recent years by state and local governments regarding environmental assessment, planning and design--in particular, concerns about water safety and its resource management. This has led to efforts to increase the efficiency of water use and monitoring its quality, demonstrating an example of the need for environmental engineers. Current and future employment growth is projected to be in professional, scientific, and technical services, as municipalities draw on the expertise of environmental engineers to address these issues. The result is that job growth in this area is expected to increase more than 10% over the next decade.

The program curriculum provides students with skills to achieve success in this challenging field that includes project and research based sequence of courses enhancing the degree program. Instructional emphasis also prepares students with the knowledge and high-level skills necessary for graduate study in environmental engineering.

Systems Engineering

Systems engineering prepares students, through an interdisciplinary approach, to have a working understanding of the technical aspects in engineering process and design. Systems engineering is a key component in systems implementation and management, as well as enabling the realization of successful engineering and technical systems. Improving business strategies of integrated systems requires a solid foundation of knowledge and skills in engineering, mathematics, computer modeling and networking, and operation research. According to the U. S. Department of Labor in the *Occupational Outlook Handbook, 2016-17 Edition*, employment of systems administrators is projected to grow around the average rate for all occupations from 2014-2021,. Demand for information technology workers continues to be high and is expected to continue to increase as companies invest in newer, faster networks. Those students who complete a degree in systems analyst or systems engineering would enter a field where the job outlook is projected to grow more quickly than the average, at over 21% during the same period.

As West Virginia strives to diversify its economy, the need for qualified employees in these disciplines represents a potential area of employment growth for the state. The U.S. Department of Labor notes in its demographic data that West Virginia ranks below the median rate in the number of engineers for the location.

The B. S. in Engineering Science is intended to be a 120-credit comprehensive major with clearly defined program objectives:

- Provide students with an exposure to Engineering and Applied sciences through its curriculum, building a strong foundation in Mathematics and Engineering, along with an emphasis on applications of these disciplines.
- Prepare students for industrial jobs either in manufacturing or research through research-oriented projects during the Senior Capstone.
- Reveal to students the connections and interactions between concepts in Computer Science, Mathematics, Engineering, Environmental Science, Business and Management.
- Prepare students with a comprehensive background in Engineering and Applied Sciences, giving students the flexibility to be trained for current and future industrial careers.

- Prepare students for graduate school by providing opportunities for undergraduate research and the presentation of their research results at professional conferences.
- Develop students' abilities to apply mathematics, science and engineering knowledge.
- Apply systems design, conduct experiments, analyze and interpret data.
- Utilize the techniques, skills, and modern engineering tools necessary for engineering practice.
- Identify, formulate, and solve real-world engineering problems.
- Promote an ability to engage in life-long learning.

6.2.b. Program Identification

The Engineering Science program is identified as **Engineering Science** as defined in CIP (Classification of Instructional Programs) developed and published by the U.S. Department of Education Center for Education Statistics' code 14.1301 as follows:

“Engineering Science. A program with a general focuses on the general application of various combinations of mathematical and scientific principles to the analysis and evaluation of engineering problems, including applied research in human behavior, statistics, biology, chemistry, the earth and planetary sciences, atmospheric and meteorology, and computer applications.”

6.2.c. Program Features

The Bachelor of Science in Engineering Sciences at Shepherd University is proposed as a comprehensive, multidisciplinary and interdisciplinary baccalaureate program utilizing courses in Computer Information Systems (CIS), Computer Information Technology (CIT), Computer Engineering (CPE), Engineering (ENGR), Environmental Studies (ENVS), Mathematics (MATH) and Physics (PHYS). The program includes Core Curriculum requirements (with some courses specific to the program), environmental and physical science requirements, mathematics and engineering requirements and for the systems engineering concentration, computer science requirements. Students may also choose from a menu or elective courses in the systems engineering concentration.

The program requirements are summarized in the curriculum overview below; the full curriculum is provided in section 6.2.c.2 of this implementation plan, with catalog descriptions in Appendix A (systems Engineering Concentration), Appendix B (Environmental Engineering concentration) and course syllabi in Appendix C.

The proposed comprehensive major in Engineering Science requires a minimum of 120 credits, of which 42 credits must be earned in courses above the sophomore level. Students in this

major will take fundamental as well as specialized courses in mathematics and engineering. In the first two years, the focus will be on building a strong foundation in those disciplines, along with the core curriculum courses required of all students. This is followed by specialized courses in mathematics and engineering in the junior and senior year. The proposed degree program will culminate with a capstone project in the senior year, which includes individual efforts along the guidelines of undergraduate research mentored by faculty members. The resulting outcome is expected to be a publication and/or presentation at a professional conference.

To graduate with a B.S. degree in Engineering Science, a cumulative GPA of 2.5 and a minimum grade of “C” in all core and elective courses are required.

Curriculum for Engineering Science – Environmental Engineering Concentration

Total hours required (including technical electives)	120 hours
Core Curriculum Requirements.....	42 hours
Specific Core Curriculum Requirements (included in the 42 hours of core curriculum).....	16 Hours
• ENGR 100 Freshman Seminar (1)	
• ECON 205 Principle of Macroeconomics (3)	
• MATH 207 Calculus I (4)	
• ENVS 201 Foundations of Environmental Science I (3)	
• ENVS 201L Foundations of Environmental Science I-LAB (1)	
• ENVS 202 Foundations of Environmental Science II (3)	
• ENVS 202L Foundations of Environmental Science II-LAB (1)	
Environmental and Physical Science Requirements.....	36 hours
Mathematics and Engineering Requirements.....	42 hours

Curriculum for Engineering Science – Systems Engineering Concentration

Total hours required (including technical electives)	120 hours
Core Curriculum Requirements.....	42 hours
Specific Core Curriculum Requirements (included in the 42 hours of core curriculum).....	22 Hours
• ENGR 100 Freshman Seminar (1)	
• ECON 205 Principle of Macroeconomics (3)	
• ECON 207 Principle of Microeconomics (3)	
• MATH 207 Calculus I (4)	
• PHYS 221 General Physics I (3)	
• PHYS 221L General Physics I Laboratory (1)	
• PHYS 222 General Physics II (3)	
• PHYS 222L General Physics II Laboratory (1)	
• CHEM 207 General Chemistry (3)	
Mathematics Requirements.....	30 hours

Engineering Requirements.....	20 hours
CIS Requirements.....	21 hours
Elective Courses.....	7 hours

6.2.c.1. Admissions and Performance Standards

The B.S. in Engineering Science program will adhere to the admissions standards as outlined in the Shepherd University Board of Governors’ policy 7. Initial admission to the university follows the standard admissions requirements detailed here:

<http://catalog.shepherd.edu/content.php?catoid=9&navoid=1114>

Admissions standards and procedures are outlined for international students at:

<http://www.shepherd.edu/admissions/international-students>

General Freshman Admission: A student applying for general freshman admission may submit an application any time after the completion of six semesters of high school.

Required documents:

- Official secondary school records documenting completion of the minimum high school academic unit requirements.
- Results of the American College Test (ACT) or the Scholastic Aptitude Test (SAT), including the writing portion.
- Required Grade Averages and Test Scores.
 - Minimum 2.0 academic grade point average (on a 4-point scale).
 - Minimum composite ACT score of 19 and/or SAT score of 910. **(Writing portion is required.)**
- * Applicants who graduated from high school more than five years prior to the time of application for admissions do not need ACT or SAT scores unless specified.
- Required Units: (Years) 4 English (including courses in grammar, composition, and literature). 3 social studies (including U.S. history). 3 mathematics (algebra I, and at least 2 higher units). 3 science (2 of 3 units must be laboratory science. At least 2 units from coordinated and thematic science 10, biology, chemistry, physics and other courses with a strong laboratory science orientation). It is strongly recommended, but not required, that the student complete a minimum of two consecutive units of a foreign language.
- Elective Units: It is recommended that the remaining elective units be chosen from the academic core (English/language arts, mathematics, science, social studies) or subjects such as computer science, fine arts, humanities, and keyboarding.

Specific requirements for the Engineering Science program:

In addition to the general requirements for admission to Shepherd University, potential students must also meet the following specific requirements for admission into the Engineering Science program:

1. Have a cumulative high school GPA of 3.00 or better.
2. Have grades of “B” or better in the following high school courses: Chemistry, Physics, Algebra I and II, Plane Geometry and Trigonometry.
3. Have completed four years of English.
4. Have minimum Mathematical scores of 24 on ACT or 510 on SAT.

Students not meeting the requirements listed above may be admitted to the program after satisfactory completion of similar college-level courses.

6.2.c.2. Program Requirements

The proposed comprehensive major in Engineering Science requires a minimum of 120 credits, among which 42 credits must be earned in upper division courses, designated at the 300 or 400 level. Students in this major will take fundamental as well as specialized courses in Mathematics and Engineering. In the first two years, the focus will be on building a solid foundation on Mathematics, Engineering and general studies followed by specialized courses in Mathematics and Engineering in the junior and senior. The proposed degree program will culminate with a Senior Capstone project in the final year. The Senior Capstone will be an individual project that conforms to departmental guidelines for faculty-mentored undergraduate research and will be expected to result in a publication and/or presentation at a professional conference.

To graduate with a B.S. degree in Engineering Science, an overall GPA of 2.5 and a minimum grade of “C” in all program core and elective courses are required.

6.2.d. Program Outcomes

The B. S. in Engineering Science is intended to be a 120-credit comprehensive major with clearly defined program outcomes:

- Graduates will be well rounded, with exposure to courses in both mathematics and engineering, coupled with their application to Engineering Sciences and infused with a strong liberal arts core.
- Graduates of the program will possess critical thinking skills and will be problem solvers in their respective careers as engineers and/or applied scientists.

- Through their experience in research projects, graduates will possess the knowledge and skills that will prepare them for success in graduate school.
- Students will possess sound theoretical backgrounds and practice in the relevant applications and practices that arise in engineering and applied sciences.

6.2.e Program Content

The proposed program is consistent with the Shepherd University mission and vision statements, core values, as well as the university's strategic plan and institutional compact. Details are provided in section 6.3.a.

6.2.e.1. Program Content and Length

The proposed comprehensive major in Engineering Science requires a minimum of 120 credits, among which 42 credits must be earned in upper division courses, designated at the 300 or 400 level. Students in this major will take fundamental as well as specialized courses in Mathematics and Engineering. In the first two years, the focus will be on building a solid foundation on Mathematics, Engineering and general studies followed by specialized courses in Mathematics and Engineering in the junior and senior. The proposed degree program will culminate with a Senior Capstone project in the final year. The Senior Capstone will be an individual project that conforms to departmental guidelines for faculty-mentored undergraduate research and will be expected to result in a publication and/or presentation at a professional conference.

As noted in 6.2.e.2, there are specific requirements for each concentration in relation to the core curriculum or general studies requirements.

To graduate with a B.S. degree in Engineering Science, an overall GPA of 2.5 and a minimum grade of "C" in all core and elective courses are required. The expectation is that a student will enroll in 15 credits per semester and complete the program in eight semesters.

6.2.e.2. General Education Content

Background to Shepherd's current common core curriculum program: In December 2011, Shepherd University approved a new core curriculum framework based on program goals and intended student outcomes from LEAP (Liberal Education and America's Promise), developed by the Association of American Colleges and Universities (AAC&U). The framework of courses may be found here: <http://www.shepherd.edu/core-curriculum/core-curriculum-checklists>

The following four goals constitute the framework of Shepherd University's core curriculum:

Goal No. 1: Knowledge of Human Cultures and the Physical and Natural World

- a) Acquire knowledge in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts through progressively more challenging problems, projects, and standards for performance
- b) Engage in both contemporary and enduring questions

Goal No. 2: Intellectual and Practical Skills throughout the Curriculum

- a) Engage in inquiry and analysis
- b) Demonstrate abilities in critical and creative thinking
- c) Effectively communicate, in both oral and written English
- d) Acquire quantitative and information literacy
- e) Demonstrate a capacity for collaboration/teamwork and problem solving
- f) Integrate the foundations and the skills for lifelong learning and wellness

Goal No. 3: Personal and Social Responsibility

- a) Develop civic knowledge and civic engagement
- b) Develop global understanding and respect for cultures and societies outside of the United States
- c) Demonstrate understanding of multiculturalism and sensitivity to issues of diversity
- d) Practice professional ethics and ethical reasoning

Goal No. 4: Integrative Learning

- a) Demonstrate a synthesis of, and advanced accomplishment across, general and specialized studies through a capstone experience in the chosen discipline.

The Basic Framework (At a Glance)

This section lists the various parts of the Core Curriculum framework and their credits. Core competencies from the Goals and ISOs document have been underlined.

The First Tier (Initial Inquiry) – 21 credits. Students may take first-tier courses at any time, but are strongly encouraged to take them in the first two years of their college career. First-tier courses should generally not have prerequisites, except as necessary given the student's previous academic background or because of course sequencing.

WRITTEN ENGLISH – 6 credits

MATHEMATICS – 3 credits.

WRITTEN ENGLISH – 6 credits.

MATHEMATICS – 3 credits.

FIRST-YEAR EXPERIENCE – Minimum of 1 credit (may be in the major)

The Second Tier (Expressions of Knowledge) – 21 credits. Students are expected to take second-tier courses in the first three years, and these courses may have prerequisites.

ARTS – 3 credits.

HUMANITIES – 6 credits.

SOCIAL SCIENCES –9 credits.

WELLNESS – 3 credits.

WRITING IN THE MAJOR – 3 credits. (This major course does not count toward the 21 credits of the Second Tier or the 42-credit minimum.)

The Third Tier (Integrative Learning) Students must have senior standing to take this course.

CAPSTONE IN THE MAJOR – 1 to 12 credits. (This course in the major does not count toward the 42-credit minimum.)

The B.S. in Engineering Science also specifies the following specific core curriculum requirements for each of the two concentrations:

Curriculum for Engineering Science – Environmental Engineering Concentration

Core Curriculum

Requirements.....42 hours

Specific Core Curriculum Requirements (included in the 42 hours of core curriculum)....16 Hours

- ENGR 100 Freshman Seminar (1)
- ECON 205 Principle of Macroeconomics (3)
- MATH 207 Calculus I (4)
- ENVS 201 Foundations of Environmental Science I (3)
- ENVS 201L Foundations of Environmental Science I-LAB (1)
- ENVS 202 Foundations of Environmental Science II (3)
- ENVS 202L Foundations of Environmental Science II-LAB (1)

Curriculum for Engineering Science – Systems Engineering Concentration

Core Curriculum Requirements.....42 hours

Specific Core Curriculum Requirements (included in the 42 hours of core curriculum)....22 Hours

- ENGR 100 Freshman Seminar (1)
- ECON 205 Principle of Macroeconomics (3)
- ECON 207 Principle of Microeconomics (3)
- MATH 207 Calculus I (4)
- PHYS 221 General Physics I (3)
- PHYS 221L General Physics I Laboratory (1)
- PHYS 222 General Physics II (3)
- PHYS 222L General Physics II Laboratory (1)
- CHEM 207 General Chemistry (3)

6.2.e.3. Minimum General Education Requirement

According to West Virginia state code and WV-HEPC policy, the minimum general education requirement for undergraduate programs is as follows:

- 15 credit hours for a technical associate's degree
- 24 hours for transfer associate's degree
- 30 hours for a bachelor's degree

The Bachelor of Science in Engineering Science is a baccalaureate degree (comprehensive major) and must have at least 30 credit hours of general education to meet state code and regional accreditor requirements. The program meets this requirement by utilizing Shepherd University's common core curriculum of 42 credit hours [Reference link:

http://catalog.shepherd.edu/preview_program.php?catoid=10&poid=828]

6.3.a. Relationship to Institutional Goals and Objectives

"Shepherd University, a West Virginia public liberal arts university, is a diverse community of learners and a gateway to the world of opportunities and ideas. We are the regional center for academic, cultural, and economic opportunity. Our mission of service succeeds because we are dedicated to our core values: learning, engagement, integrity, accessibility, and community."

The Engineering Science program will support the University mission as follows:

- **Fulfill our duty to serve the community:** Generate graduates with a well-rounded background in Engineering and Applied Sciences, thereby serving the workforce and the economy in West Virginia's Eastern Panhandle and surrounding communities. There is a documented need for employees with a well-rounded exposure in Engineering and Applied Sciences.

- **Promote Core Values:** Because of the interdisciplinary nature of the program, students will have a diverse approach to their education, will be engaged through research, publishing and internship opportunities, and have access to this program enhanced by lower rates of tuition in West Virginia.
- **Enhance research and publishing capabilities:** Maintain resources and tools necessary to support research projects for faculty members and also involve undergraduate students. The results of this research will lead to publications in peer-reviewed journals and presentations at professional conferences. These professional scholarship outcomes also fulfill target metric areas in the WV-HEPC master plan for higher education, *Leading the Way*.

The Department of Computer Science, Mathematics and Engineering (CME) at Shepherd University currently offers an Industrial Mathematics Degree program that targets students with an aptitude towards research in Applied Mathematics and its connections to solving industrial problems. CME also offers degrees in both Computer Science and Computer Engineering. The proposed Engineering Science program will engage potential students who are more inclined towards Engineering, Sciences and the connections therein. This distinction is realized through the capstone course and/or co-op/internship opportunities where research projects will focus more on the application of intended student outcomes to solving problems that arise in the field of Engineering and Applied Sciences.

A degree in engineering science will also support Shepherd's vision statement:

"Shepherd – a premier liberal arts university. We will be a nationally respected community of learners where passion, purpose, and experience unite to inspire individuals to shape the world."

The proposed degree in Engineering Science will serve the regional workforce by providing a broad-based liberal arts education, hands-on course work through group and individual laboratory projects, and various experiential, collaborative arrangements with government, business, and industry where students apply knowledge and skills in a real world environment. As the program grows, it will support ever-increasing numbers of research projects, faculty development opportunities, academic exchanges, and scholarly/creative presentations by both faculty and students.

Special Features that Make the Institution a Desirable Place to Initiate a Program

The location of Shepherd University is central to a variety of Federal agencies and private industries that require employees with critical thinking, data analysis, and advanced problem-solving skills that are associated with a background in Engineering Sciences.

These critical skills are associated with the strong foundation provided by the University's core curriculum, as well as advanced, specialized programs of study in the Schools of Arts and Humanities, Business and Social Sciences, Education and Professional Studies, and Natural Sciences and Mathematics. This is a solid foundation on which to build an integrative, interdisciplinary program in the area of engineering science [Reference link: <http://www.shepherd.edu/core-curriculum>]

CME has integrated multiple disciplines to include faculty in the areas of Computer Science, Mathematics and Engineering, making it easier to coordinate course offerings. The department's long history of emphasizing undergraduate research has resulted in numerous presentations and publications by students and faculty in existing programs as well as those with interdisciplinary features. We are confident students in the quad-state area with the desire and motivation to pursue engineering and/or mathematics, coupled with an aptitude towards research and making interdisciplinary connections, will benefit from Shepherd's proposed program in Engineering Science.

6.3.b. Existing Programs

Currently there are no engineering science programs within a seventy-five mile radius of Shepherd University. Engineering Science is not a common program in major universities due to its interdisciplinary nature, and the lack of cohesiveness across the disciplines of computer science, mathematics and engineering. Because of our academic organization and structure, Shepherd University has a unique opportunity to provide a quality engineering program to potential students, as all three disciplines are housed in the same department (Reference link: <http://www.shepherd.edu/cmeweb/>).

Marshall University offers a B.S. in Engineering (BSE) housed in its College of Engineering and Information Technology. The BSE program at Marshall University has its focus on civil or mechanical engineering. As stated above, the three disciplines (Computer Science, Mathematics and Engineering) encountered in the Engineering Science degree program are not separate disciplines but are housed within a single department. Shepherd's proposed Engineering Science degree program offers two concentrations: Systems Engineering and Environmental Engineering.

West Virginia University does offer a variety of engineering opportunities; however, it does not have a stand-alone environmental engineering program. Their engineering concentration is civil and environmental. Shepherd's program would be the only stand-alone environmental engineering program in the state.

In the Washington-Baltimore area and beyond, there are a number of prestigious institutions that offer these concentrations at a much higher rate of tuition:

- Systems Engineering: Penn State University, Johns Hopkins University, Georgetown University, George Washington University, and George Mason University.
- Environmental Engineering: Johns Hopkins University, Morgan State University, University of Maryland, and Virginia Polytechnic Institute (VPI).

Shepherd's unique location in the Eastern Panhandle offers an outstanding opportunity for not only students from West Virginia, but also from the quad-state region (MD, PA, VA, DC) to be a part of this proposed new degree program in Engineering Science, offered at an affordable rate of tuition [Reference Link: <http://www.shepherd.edu/tuition-and-fees/>].

6.3.c. Program Planning and Development

The CME program has taken deliberate and targeted steps to prepare for the future implementation of an undergraduate degree program in Engineering Science. The need for a four-year degree in Engineering Science has been an on-going discussion among Dean of the School of Natural Sciences and Mathematics, the chair of the Department of Computer and Information Sciences, Mathematics and Engineering departments and the departmental faculty for over 10 years. These discussions resulted in the creation of the Computer Science, Mathematics and Engineering department by merging the existing Mathematics, Engineering and Computer Information Science departments in 2005.

The merger was followed by recruitment of mathematics faculty with professional and academic qualifications in the areas of applied mathematics and engineering. The proposed Engineering Science program is part of an interdisciplinary field of study that draws upon courses from the curriculum in Mathematics, Engineering and Computer Information Sciences, Chemistry and, the Institute of Environmental and Physical Sciences . Faculty qualifications, research and scholarship outcomes are demonstrated in Appendix D-Faculty vitae

6.3.d. Clientele and Need

The proposed Engineering Science program provides opportunities to recruit and retain students who wish to remain at Shepherd University and pursue a career in Applied Sciences and Engineering . These students may desire to remain in the area due to financial, familial or other preferences such as local internships opportunities. This program would allow students to complete a degree in Engineering Science directly related to the workforce needs of the Eastern Panhandle. The program will also utilize existing faculty expertise in engineering and

the applied sciences across multiple disciplines in Shepherd's School of Natural Sciences and Mathematics.

The applicant pools that will be specifically targeted by recruitment efforts for this program include, but are not limited to the following groups:

- Current Shepherd University students pursuing the engineering minor and core engineering requirements in the mathematics major would be the primary target population. Without this degree program, these students would need to transfer to other institutions to pursue a four-year degree in engineering. The proposed program would aid in retaining these students both at Shepherd and within the state.
- New students recruited to Shepherd University as mathematics majors with an interest in the engineering and applied sciences would also be a target audience. The program will be actively advertised to high schools to show prospective students that a variety of degree programs are available at Shepherd, which would allow them to remain in the region to complete the undergraduate degree.
- Students at local two-year institutions such as Hagerstown Community College and Blue Ridge Community and Technical College who wish to continue their studies to achieve a four-year degree also represent a potential pool of students. Working with the Office of Enrollment Management, faculty and administrators will develop articulation agreements (i.e., 2+2 programs) to coordinate curricula, allowing graduates of two-year institutions to easily transition into a four-year program at Shepherd.
- The Environmental Engineering concentration was eliminated in fall 2015 from the Institute of Environmental and Physical Sciences at Shepherd University. Currently there are over 20 students in that concentration (not reflected in enrollment projection-Form 1. Offering this degree program with a concentration in Environmental Engineering provides a relevant baccalaureate degree from their academic area of interest.

6.3.e. Employment Opportunities

Given the affordable tuition at Shepherd University, growth and expansion in the government and industrial sector in the quad-state area and the increasing student interest in the applied sciences and engineering, we anticipate a high demand for this program. As noted, Shepherd University is accessible to potential students both in the Eastern Panhandle of West Virginia and the surrounding region.

Shepherd University's location is ideal for initiating an Engineering Science program. According to a recent study by the West Virginia Bureau of Business and Economic Research (Reference

link: <http://be.wvu.edu/bber/pdfs/BBER-2014-04.pdf>), the counties surrounding Shepherd University (Jefferson and Berkeley) are expected to sustain continued growth in the future, continuing progress that has taken place over the last two decades. This has led to an increasing number of educational and employment opportunities for West Virginia residents. Many of these jobs are in the field of engineering and applied sciences, and there has been a strong demand for engineers, engineering management personnel, as well as for applied scientists in the area of manufacture and information technology. Employment opportunities remain strong for this discipline, with specializations like environmental and systems engineering having potential job rates higher than the national average for the next decade (Source: The U. S. Bureau of Labor Statistics, 2012).

The continued integration of computer technology in a variety of manufacturing settings will require current and future employees to have a strong foundation in the scientific and engineering principles behind the applications. The introduction and implementation of this program will fulfill the recent call by various civic and private groups like the Chamber of Commerce and Gateway New Economic Council to increase the number of highly-skilled workers in the Eastern Panhandle of West Virginia and the region Shepherd University serves.

According to the U. S. Department of Labor in the *Occupational Outlook Handbook, 2016-17 Edition*, employment of systems administrators is projected to grow 8% from 2014-2021. Demand for information technology workers is high and should continue to increase as companies invest in newer, faster networks. For those students who move towards the area of systems analyst or systems engineering, the job outlook is expected to grow at over 21% during the same period.

The need for trained environmental engineers is illustrated through the numerous employment opportunities available for individuals trained in this field, in industry or at state and federal agencies, and with environmental consulting firms. According to <https://collegegrad.com/>, prospects for employment should be favorable due to anticipated population growth, as well as a wave of retirements in that field with job growth in this area expected to increase 12% over the next decade.

Shepherd University has the third highest economic impact among West Virginia's four- and two-year colleges according to a study commissioned by the West Virginia Higher Education Policy Commission. The study, titled "The Economic Impact of Public Institutions of Higher Education in West Virginia," shows that Shepherd's economic impact on Berkeley and Jefferson counties is \$91.1 million. Part of this study, which was conducted by the West Virginia University Bureau of Business and Economic Research, examined the economic impact of direct

university expenditures like supplies and utilities, university payroll, and out-of-state student expenditures. The study showed that in fiscal year 2014, Shepherd had a total budget of \$60.8 million and spent about \$32.6 million on salaries and benefits for its 647 employees.

(Reference Link: <http://wvutoday.wvu.edu/n/2016/08/04/west-virginia-s-public-higher-education-institutions-have-2-7-billion-impact-on-state>)

6.3.f. Program Impact

The Engineering Science program will have minimal impact on the programs at Shepherd University outside of those in the School of Natural Sciences and Mathematics. Courses needed for the program currently exist in other degree programs and concentration areas, and several Economics and Management courses have been designated as required for the Systems Engineering concentration; however, they are currently part of Shepherd University's Core Curriculum.

Current and future students in Mathematics and Computer Science could move to this degree option if it is perceived as better meeting their needs, academic background, and will provide enhanced job opportunities.

6.3.g. Cooperative Arrangements

Cooperative arrangements will be a major component in Shepherd's Engineering Science program. Currently, the CME department places student interns in many facilities in the region such as the Coast Guard, Veterans Administration, KRM Associates Inc., Volvo Power Train , Mountain View Solar and the Internal Revenue Service. There is also an extensive network of cooperative arrangements with local business organizations. It is anticipated that the arrangements mentioned above will grow with time and supplement the Engineering Science program in terms of internship and job placement. Students will also have the opportunity to take CPE 492, Co-operative Work Arrangement in Computer Science and Engineering (See Appendix B for course descriptions). Information on co-operative education may be found here: <http://www.shepherd.edu/cooperative-education>

6.3.h. Alternatives to Program Development

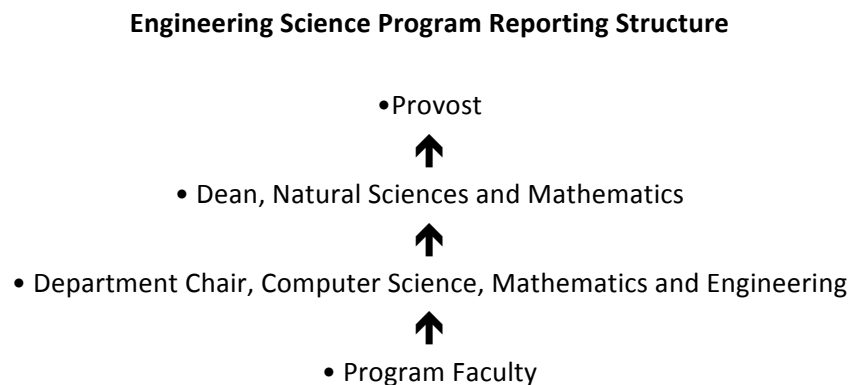
As noted earlier in this document, the CME department has taken specific and targeted steps to prepare for an undergraduate graduate program in Engineering Science. These include recruitment of faculty with the academic credentials and professional experience to teach in the program, the merging of several departments into a cohesive whole, and ongoing discussions with internal and external stakeholder groups.

The proposed program provides the best opportunity for students in the Eastern Panhandle to pursue the undergraduate degree in engineering science at a reasonable cost.

6.4.a. Program Administration

The B.S. in Engineering Science program will be housed within Shepherd University's Department of Computer Science, Mathematics and Engineering (CME), which in turn is one of four departments within the School of Natural Sciences and Mathematics. Several departments and programs in the school will offer courses listed in the proposed B. S. in Engineering Science.

The organizational reporting structure is shown below:



6.4.b. Program Projections

The first-year enrollment for the Engineering Science program should be at least 12 students, as there are currently 20 students enrolled in the Environmental Engineering concentration, currently housed in the Institute of Environmental and Physical Sciences. It is expected that these current students will make an academic change to the new degree program. As new students are attracted to the program, the enrollment is projected to reach 15 in the second year and reach 20 in the third year. The goal is to eventually sustain an annual enrollment of 30 Engineering Science majors. Each FTE major is expected to take a total of 30 credit hours per

academic year in order to graduate in four years. This value was used to calculate the *number of credit hours generated by majors in the program* on FORM 1.

WV-HEPC FORM 1: FIVE-YEAR PROJECTION OF PROGRAM SIZE

	First Year (2017)	Second Year (2018)	Third Year (2019)	Fourth Year (2020)	Fifth Year (2021)
Number of students served					
through course offerings					
of the Program:					
Headcount	12	15	20	25	30
FTE	.8	1.0	1.33	1.67	2
Student credit hours generated by courses in the program (for the full academic year):	128	160	240	360	400
Number of Majors:					
Headcount	12	15	20	25	30
FTE Majors (headcount)	12	15	20	25	30
Number of student credit hours generated by majors in the program for the full academic year:	360	450	600	750	900
Number of degrees to be Granted (annual total):	0	0	0	7	10

6.4.c. Faculty Instructional Requirements

There will not be additional faculty lines required to implement the B. S. in Engineering Science. As the program grows, the faculty, chair and school dean will work through the institutional budget process to request an additional faculty line.

Working with President Hendrix, the Provost, Deans' Council and Executive Leadership, the institution is currently exploring the implementation of new programs at the undergraduate and graduate levels to meet the needs of the communities it serves. In the process, a specific pro forma is being developed to address resources needed to implement and sustain new programs as it relates to new income streams and reallocation of current fiscal and human resources. The pro forma process has also been used in the past to address new hires required for these innovative academic programs.

The Faculty vitae in Appendix D clearly demonstrate the qualifications of Shepherd's faculty regarding academic and professional qualifications, research initiatives and scholarship outcomes.

6.4.d. Library Resources and Instructional Materials

Shepherd University has the classrooms and laboratories, library resources, and instructional materials required for the proposed Engineering Science program.

All classrooms and other teaching spaces on campus are equipped with a standard set of information technologies: a computer, overhead projector, web access, and white boards. Classroom and lab technology upgrades were a top priority in the previous institutional strategic plan (2009-2013). Some classrooms have additional technology capabilities, such as "smart" boards, or a high-end sound system, and specialized technologies for areas such as graphic design and computer science. Classroom and laboratory computers and software are replenished on an established rotation cycle, ranging from five years for computers to seven years for projectors.

The Shepherd University library currently subscribes to select IEEE (Institute of Electrical and Electronics Engineers) and ACM (Association for Computing Machinery) periodicals along with the MAA (Mathematical Association of America) and AMS (American Mathematical Society) monthlies. There is no charge to the campus community for the use of these journals and also for online article searches. Public access computers in the library can be used to browse the Internet or for literature searches. In addition, the library provides for interlibrary loan on articles that are not available online or through journals in the library holdings.

Library staff includes the following, many of whom hold specialized credentials:

- Dean (Faculty Librarian);
- Four additional Faculty Librarians;
- One Staff Librarian (Archives);
- One part-time Staff Reference Librarian;
- One professionally credentialed Librarian in a paraprofessional position;
One other FT paraprofessional;
- Two part-time PT paraprofessionals;
- One IT Assistant;
- Approximately 3.5 FTE of work-study student employees.

The online digital library is licensed for group membership so students and faculty have easy access to relevant publications while in the library, as well as remotely. Users have access to thousands of full-text journals from over 50 databases, including subscription databases such as LexisNexis and JSTOR. The library assesses no fees for online searches or for its interlibrary loan services. Librarians also teach a one-credit course titled “Research Methods and Information Retrieval” (LBSC 100).

Professional librarians are available to assist faculty and students for a total of about 56 hours a week. In addition to LBSC 100, there are regularly scheduled tours, workshops, and orientation sessions for those who need assistance in utilizing the library’s materials. Librarians offer tailored information literacy skills class sessions that focus on using the library’s databases for research assignments. These sessions are held in the library’s instruction lab enabling students to develop their online searching skills with the assistance of a librarian. The library is normally open 86 hours per week during the fall and spring semesters and has a computer-equipped workroom open 24 hours a day. The reference section of the library is typically open 56 hours weekly during the regular academic year. At present there are 33 reference lab computers and 8 public computers on the main floor of the library. The 24-hour room has 8 computers; the instruction lab 24, the third floor 10, and 38 are available for checkout.

Below is a statistical snapshot of the Scarborough Library as of January 2016.

Collection Holdings:

1. Audio CDs	2,517
2. Books & Bound Serials	136,729
3. E-Books	6,727
4. Electronic Journals & Databases*	302*
5. Government Documents (Federal & WV)	14,017
6. Maps	638

7. Microforms	16,292
8. DVDs, Videos	2,162

*Note: 145 online periodical subscriptions and 157 electronic resources/databases. These do not include full-text journals available in the databases.

6.4.e. Support Service Requirements

The institution's academic and student support services are adequate to address the needs of students in the Engineering Science program. As noted in 6.4.f., the program will be housed in the Snyder and Stutzman-Slonaker Halls. Please see this section for specific resources found in these instructional spaces.

Shepherd's Academic Support Center, which features tutorial services, IT User Support, and the Center for Teaching and Learning, is housed in the nearby Scarborough Library. Disability Support Services are also available on the campus. The Academic Support Center provides students with a variety of services aimed at supporting student success.

These include:

- placement testing;
- student advising by professional advisors;
- campus tutoring program;
- assistance with writing and editing essays;
- directing of stretch-model classes in writing and mathematics;
- TRiO Student Support Services: This program provides additional support and services to 160 students who are either first-generation college students, have a disability, and/or are low-income [<http://www.shepherd.edu/trio>].
- Disability Support Services facilitates student success by providing accommodations that allow students with diverse needs to achieve their academic and social potential. Disability Support Services collaborates with students, faculty, staff, and administration to maintain safe learning and living environments based on mutual respect and acceptance of differences [<http://www.shepherd.edu/disability>].

6.4.f. Facilities Requirements

Courses for the proposed Engineering Science major will be taught in facilities available to the School of Natural Sciences and Mathematics and the Department of Computer Science, Mathematics and Engineering. These facilities are adequate for the academic and laboratory requirements for the proposed Engineering Science program. This includes both instructional

and laboratory space in Snyder and Stutzman-Slonaker Halls. Classrooms vary in capacity and all are technologically outfitted with computer projection systems and web access. The CME department recently acquired a 3-D printer and a PNC machine that would further support the proposed Engineering Science program. The March 2016 report for the Higher Learning Commission notes that there are 28 teaching and research labs for the natural and physical sciences housed within the facilities listed above.

The department has two engineering labs and one mathematics lab with access to MATLAB (engineering software) and MAPLE (technical computing software for engineers). The engineering laboratories are also used for the Analog and Digital Electronics course. The department also has three laboratories used for computer programming, computer organization, and networking and security. In addition, students are able to use two labs for experimenting with robotics-centric design and programming. The facilities feature state-of-the-art equipment and are easily adapted to teaching all the courses necessary for the proposed Engineering Science program.

6.4.g. Operating Resource Requirements

WV-HEPC FORM 2: FIVE-YEAR PROJECTION OF TOTAL OPERATING RESOURCES REQUIREMENTS*

	First Year FY(2018)	Second Year FY(2019)	Third Year FY(2020)	Fourth Year FY(2020)	Fifth Year FY(2021)
A. FTE POSITIONS (by semester)					
1. Administrators	0	0	0	0	0
2. Full-time Faculty	.25	.25	.50	.75	1.0
3. Adjunct Faculty	.33	.50	.66	.66	.75
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: Current clerical and instructional staffing is built into the budget; costs represent new hires.

B. OPERATING COSTS (by semester)

1. Personnel Services:

a. Administrators	0	0	0	0	0
b. Full-time Faculty	0	0	62,500	65,000	65,000
c. Adjunct Faculty	2,800	5,600	7,000	7,000	8,400
d. Graduate Assistants	0	0	0	0	0
e. Non-Academic Personnel:					
Clerical Workers	0	0	0	0	0
Professionals	0	0	0	0	0
Total Salaries	2,800	5,600	69,500	72,000	73,400

WV-HEPC FORM 2, page 2

FIVE-YEAR PROJECTION OF TOTAL OPERATING RESOURCES REQUIREMENTS*

	First Year (2017)	Second Year (2018)	Third Year (2019)	Fourth Year (2020)	Fifth Year (2021)
2. Current Expenses*	15,900	16,750	17,500	17,850	18,000
3. Repairs and Alterations	0	0	0	0	0
4. Equipment:					
Educational Equipment	14,300	15,000	15,700	16,000	16,200
5. Nonrecurring Expense	0	0	0	0	0
Total Costs	30,200	31,750	33,200	33,850	34,200

C. SOURCES

1. Gen. Fund Appropriations (Appropriated Funds Only)	0	0	0	0	0
___ Reallocation ___ New funds					
2. Federal Government (Non-appropriated Funds Only)					
3. Private and Other Revenue (Lab fees)	45,400	46,000	47,500	49,000	50,000
Total All Sources	45,400	46,000	47,500	49,000	50,000

***NOTE:** The instructional costs and educational expenses for the proposed Engineering Science program major are built into the current institutional budget. The program will be housed in the Department of Computer Science Mathematics and Engineering, on whose budgets these projections are based. The expenses include supplies, maintenance contracts for equipment, printing, student activities, vehicle rental, copy costs, etc.

6.4.h. Source of Operating Resources

Shepherd University is not seeking new financial support for implementing the Engineering Sciences program. The program will be supported mainly by tuition revenue, lab fees and the institutional budget. All funding is subject to approval through the institution's normal budget review and allocation process. Resource needs are not expected to extend beyond the usual operating costs for any similarly sized educational program. As the program develops, and as noted in 6.4.c., the program will work through the institutional process to develop a request for an additional faculty line.

6.5. Program Evaluation

Shepherd University has established procedures for program evaluation and has cultivated a culture of assessment over the past decades. Assessment occurs at multiple levels across the institution, in both academic and administrative units, and embraces a full-circle approaches that leads to programmatic improvements. The University, school, and departmental mission statements align and the assessment process is connected to strategic planning at each level.

6.5a. Evaluation Procedures

The CME department is required by the Center for Teaching and Learning at Shepherd University to perform assessments in all areas of degree programs, including the proposed new Engineering Science degree program. Technical electives found in the program curriculum, along with electives in the Humanities and Social Sciences will ensure that students are well prepared with the essential skills and knowledge for a variety of career paths.

The B.S. in Engineering Science will undergo regularly scheduled evaluation using the established program review process and guidelines. These include maintaining an accurate assessment record and continual monitoring of the program by the Center for Teaching and Learning, as well as by the department. These measures will address the viability, necessity, and quality of the program to ensure that objectives and goals are met. With the aim of continuous quality improvement, the proposed program will also meet all requirements as established by the University's accrediting body, the Higher Learning Commission (HLC).

Assessment Procedures:

The Department of Computer Science, Mathematics and Engineering is committed to the institutional assessment process, as it measures our effectiveness in preparing students for the field of engineering. Capstone courses have been designed for the engineering majors, an integral component in assessing student learning outcomes prior to graduation. In addition, the department plans to assess this new degree program using guidelines established for engineering programs by **ABET** (Accreditation Board for Engineering and Technology).

In the assessment plan for engineering programs, three constituent groups are identified for assessment: students, employers and faculty. This process also sets up identifiable objectives with skills necessary for successful engineering practice, and outcomes for engineering programs to ensure the objectives can be achieved.

The department is also aware of the importance of **ABET** accreditation. Working collaboratively, faculty have conducted an extensive overhaul of the curriculum for our existing engineering and computing programs. The mathematics standards and requirements have been strengthened and undergraduate research has been introduced. Faculty have participated in an ABET Accreditation Workshop and are planning to attend the **ABET** Symposium in Baltimore in April 2017. The CME department has no reservations in preparing our current engineering and computing programs and the proposed Engineering Science program for **ABET** accreditation in the next few years.

Program Outcomes: The Engineering Science program will provide students with skills necessary for successful engineering practice. These skills include critical thinking, problem solving, design and implementation, data interpretation, computer and information literacy, teamwork and communication, modern engineering software and tools, and ethics. The Engineering Capstone courses will be the main component in assessing program outcomes prior to students' graduation.

Course Evaluation: Each course in the Engineering Science program offered by the department has a set of course objectives that follow ABET format and guidelines. The program curriculum was developed by the departmental faculty with guidance from the department chair. This collaborative process ensures a thorough coverage of engineering program objectives as identified by ABET. At the close of each semester, students have the opportunity to evaluate the classes and provide their feedback regarding the course, classroom environment and instructor. The department makes adjustments based on the course evaluation results to guarantee the quality of each course offering and the degree program as a whole.

Examples of Feedback for Continuous Improvement:

1. Students in Engineering Capstone classes will present their capstone project to the departmental faculty. Through their presentations, students will demonstrate and will be asked about their experience as engineering students at Shepherd University, with a focus on engineering program learning outcomes.
2. The department maintains close relationships with local employers such as the U.S. Coast Guard Operations Systems Center, Volvo Powertrains, etc. Through a survey, these employers will be asked to make comments regarding the preparation of our graduates and suggestions for program improvement.
3. Engineering alumni regularly visit Shepherd University during university or departmental events such as annual Shepherd University Robotics Festival. This stakeholder group provides valuable feedback on how well our engineering programs have prepared them for their career.

Feedback will be examined and evaluated by the department to generate appropriate plans for program improvement.

University Process: A major strength of the University assessment program is that all departments and administrative units across campus have assessment facilitators and produce assessment plans and reports on an annual basis. Each academic program is required to submit an assessment plan and report annually to the Center for Teaching and Learning (CTL). The CTL

requests that assessment facilitators from all departments and administrative units identify at least two to three intended student-learning outcomes. Within these outcomes, faculty and assessment facilitators provide two means of assessment (direct and indirect – academic departments are encouraged to provide as many direct measures as possible). Each assessment strategy must include criteria or benchmarks for success. Following the completion of these assessments, the data are analyzed and assessment facilitators (with their respective faculties) decide how the assessment data will be used to improve student learning. In other words, all departments and units establish two to three learning goals, direct and indirect means of measuring these goals, benchmarks for success, and a detailed plan for improvement. After each plan and report are reviewed by the Assessment Task Force, department and unit assessment facilitators receive a letter from the Dean of Teaching, Learning, and Instructional Resources recognizing accomplishments and offering suggestions for areas of improvement. Assessment plans and reports are transparent and posted on the CTL website [http://www.shepherd.edu/ctl/assess_learning.html].

Reports are uploaded into the WEAVE assessment program to generate departmental, programmatic, and/or unit reports. Such reports are generated as evidence for institutional and programmatic accreditation site visits. Additionally, each semester the CTL hosts assessment, advisement, and Focus on Student Learning (FOSL) workshops. Faculty members are encouraged to attend these workshops as professional enhancement, e.g., in innovative pedagogy, and to contribute to campus discussions on these topics. A campus goal is to integrate the Global Learning Inventory, or a comparable instrument, into the summative assessment.

Program Review Procedures: Shepherd University ensures the ongoing quality of its academic programs, its faculty, and curricula through regular assessment in cyclical program reviews. These reviews occur at the undergraduate and graduate levels. Information regarding the cycle and guidelines are found in Appendix G of the faculty handbook located here: <http://www.shepherd.edu/employees/senate/documents/handbook.pdf>

The Shepherd University Program Review Committee utilizes an evaluation procedure and established criteria for on-campus program reviews consistent with policy. Crucial components of the review are the unit self-study, which must state accomplishments achieved since the last review, and the use of an external reviewer who evaluates the self-study, completes a site visit, and issues a report with commendations and recommendations. The use of external experts in the field helps to ensure continuous quality improvement of a program. Changes made as a result of the program review process are an important component in closing the loop on assessment as it relates to the mission and strategic priorities of the University. The review of

academic programs is listed as a power and duty of the Board of Governors by legislative policy. Committee findings and recommendations are reported to the Board during its April meeting.

6.5.b. Accreditation Status

With the development of the undergraduate program in Engineering Science, Shepherd would pursue initial accreditation with the Accreditation Board for Engineering and Technology. In anticipation of seeking accreditation, the curriculum for the B.S. in Engineering Science, as well as course syllabi and student outcomes have been developed to address ABET standards. It should be noted that many of the items and information required for initial accreditation are similar to those required for the WV-HEPC Series 11 documents.

The Engineering Science program would also be covered by the institution's regional accreditor, the Higher Learning Commission (HLC).

Appendix A: Course Descriptions

Systems Engineering Concentration

The following course descriptions are found in Shepherd University's online catalog:
catalog.shepherd.edu.

Curriculum for Engineering Science – Systems Engineering Concentration

Specific Core Curriculum Requirements, 22 Hours

ENGR 100 - Freshman Seminar

(1 cr) This course provides beginning freshman students with information and tools to prepare them for a successful life as a student. This course is aimed at developing the cognitive skills required in computer, mathematics, and engineering courses. The activities in this course are designed to introduce the student to an academic support system through which freshman students can explore various concentrations in computer science, mathematics, and engineering and learn academic success strategies including developing a support network. This course also helps students develop good wellness habits that have lifelong benefits. One pass/fail credit. **CORE CODE: FY**

ECON 205 - Principles of Macroeconomics

(3 cr) Introduction to fundamental economic concepts including production possibilities and economic growth, market supply and demand analysis, money, banking, and government fiscal and monetary policies. Emphasis is placed upon fluctuations in national income, employment, and the price level. Prerequisites: Qualifying Mathematics placement scores of ACT 19 or SAT 460; or MATH 101 or higher. **CORE CODES: SO CK GL**

MATH 207 - Calculus I

(4 cr) Fundamental concepts of calculus, using analytic geometry. After preliminaries about the real number system, intervals, and functions, properties of limits are carefully stated. These are used to develop standard differentiation formulas. Applications of the derivative (as a rate of change) are stressed in a wide variety of problems. Introduction to integration via anti-differentiation and area and the fundamental theorem. Applications of the integral (volumes, arc length, surface area, etc.) Prerequisites: **MATH 108** or satisfactory math placement score. **CORE CODES: MA**

PHYS 221 - General Physics I

(3 cr) A calculus-based treatment of fundamentals of selected classical physics topics including motion, force, Newton's laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. **PHYS 221L** must be taken concurrently with PHYS 221. Prerequisite/corequisite: **MATH 207**.

PHYS 221L - General Physics I Laboratory

(1 cr) A two hour per week laboratory course focusing on selected classical physics topics including motion, force, Newton's laws, energy, momentum, gravitation, rotation, acoustics,

fluid dynamics, and thermodynamics. Corequisite: Must be taken concurrently with [PHYS 221](#).

PHYS 222 - General Physics II

(3 cr) A calculus-based treatment of the fundamentals of selected classical and modern physics topics including acoustics, fluid dynamics, thermodynamics, electromagnetism, optics, relativity, and quantum mechanics. Prerequisites: [PHYS 221](#). Corequisite: [PHYS 222L](#) must be taken concurrently with PHYS 222. **CORE CODES: LS**

PHYS 221L - General Physics I Laboratory

(1 cr) A two hour per week laboratory course focusing on selected classical physics topics including motion, force, Newton's laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. Corequisite: Must be taken concurrently with [PHYS 221](#).

CHEM 207 - General Chemistry I

(3 cr) CHEM 207 and its companion lab, CHEM 207L, are the first part of a two-semester sequence that serves as an introduction to modern chemistry for students majoring in the sciences. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include measurements and units, atomic and molecular structure, periodic properties of the elements, chemical bonding, stoichiometry, chemical reactivity, thermochemistry, and the structure and properties of gases, liquids and solids. This course, along with [CHEM 207L](#), [CHEM 209](#), and [CHEM 209L](#), fulfills the Core Curriculum Laboratory Sciences requirement. Prerequisites: Background in high school chemistry and algebra. Corequisite: **It is recommended, but not required, that [CHEM 207L](#) be taken concurrently.** **CORE CODES: LS**

Mathematics Requirements, 30 Hours

MATH 208 - Calculus II

(4 cr) Continuation of MATH 207. Calculus of exponential, logarithmic, and trigonometric functions; techniques of integration. Review of conic sections in standard form and in rotation. Polar coordinates, l'Hôpital's rule, improper integrals, infinite series, and Taylor series. Prerequisites: [MATH 207](#).

MATH 254 - Discrete Mathematics

(3 cr) Topics from modern mathematics with particular emphasis on those with applications to computer science. Logic, sets, number systems and number theory, enumeration, graphs and trees, matrices, finite algebraic systems, and analysis of algorithms are examined. Prerequisites: [MATH 154](#) or [MATH 155](#); or [MATH 205](#) or [MATH 207](#).

MATH 307 - Introduction to Linear Algebra

(3 cr) The course begins with a study of linear systems, using matrices and determinants to solve them. Vector spaces are treated axiomatically and discussed geometrically. Linear transformation of vector spaces and their matrix representations are considered. Finally eigenvectors and eigenvalues are considered with applications.

Prerequisites: [MATH 155](#) or [MATH 254](#), and [MATH 207](#) or [MATH 205](#).

MATH 309 - Calculus III

(4 cr) Continuation of MATH 208. Vectors in the plane and in space, parametric equations, solid analytic geometry. Calculus of functions of several variables including partial derivatives, multiple integrals, and their applications. Prerequisites: [MATH 208](#).

MATH 310 - Differential Equations

(4 cr) Examines first order ordinary differential equations (e.g., exact, separable, Bernoulli, homogeneous), direction field, numerical solution; higher order equations including the methods of Lagrange and undetermined coefficients; Laplace transforms; systems of first order equations; introduction to Fourier series; and applications in the physical and biological sciences. Prerequisites: [MATH 208](#), and [MATH 307](#).

MATH 318 - Numerical Analysis

(3 cr) A study of the mathematics of numerical approximation. Topics include initial value problems, iterative techniques for linear systems, approximation theory, finding eigen values, boundary value problems, and numerical solutions to partial differential equations.

Prerequisites: [ENGR 102](#), [MATH 307](#), and [MATH 310](#).

MATH 321 - Probability and Statistics

(3 cr) Topics include axioms for probability; random variables, discrete and continuous probability distributions; expected value; functions of random variables; covariance; conditional probability; independence; confidence intervals; tests of hypotheses: normal, t, signed-rank, chi-square tests; linear regression and correlation. Prerequisites: [MATH 309](#).

MATH 329 - Mathematical Modeling

(3 cr) A study of how to model the world around us using mathematics, how to solve the resulting equations, and how to apply the results. Includes a thorough study of how to use both quantitative and qualitative solution behavior in the modeling process.

Prerequisites: [MATH 318](#), [MATH 321](#), and [MATH 310](#).

MATH 354 - Operations Research

(3 cr) An introduction to main topics of operations research: linear programming, network optimization, dynamic programming, and queueing theory. The simplex algorithm will be studied in detail, including duality theory and sensitivity analysis. In network optimization the OSPF algorithm, PERT, and CPM will be considered. Examples of applications from industry, notably some queueing algorithms. Additional topics may be chosen from Markov chains, integer programming, nonlinear programming, game theory and decision analysis, and simulation. Prerequisites: [MATH 155](#) and [MATH 207](#) or [MATH 254](#).

Engineering Requirements, 20 Hours

ENGR 101 - Engineering I

(3 cr) Topics include developing engineering design and problem-solving techniques including group projects and team work, basic engineering design concepts; spreadsheet programming; MathLab, dimensional analysis, use of computer, data, analysis, design, design process, visualization, material science, vector analysis, technical report writings and engineering ethics, professional and ethical responsibilities; and technical library and internet research. Prerequisites: [MATH 108](#).

ENGR 102 - Engineering II

(3 cr) Topics include an introduction to computing environments for solving engineering problems including computer-aided engineering (CAE), mathematical packages, and structured programming processes including algorithms, pseudo code, and editing and debugging with the C++ programming language. Applications include topics from numerical analysis and graphical representations. Corequisite: [MATH 207](#).

ENGR 221 - Introduction to Electrical Engineering

(3 cr) Topics include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, energy storage elements, RC and RL circuits, unit step response, and second order circuits. Prerequisites: [ENGR 102](#) and [MATH 207](#).

ENGR 222 - Electrical Engineering Laboratory

(1 cr) A laboratory course in electrical engineering, 3 hours per week, to be taken simultaneously with [ENGR 221](#).

ENGR 224 - Electrical Circuits

(3 cr) Introduction to network analysis including sinusoidal (AC) steady state, average and RMS values, phasors, polyphase systems, complex frequency, network frequency response, two port networks and transformers, Fourier methods, and Laplace Transforms. Prerequisites: [ENGR](#)

[221](#) and [MATH 208](#).

ENGR 225 - Electrical Circuits Laboratory

(1 cr) A laboratory course in electrical circuits, 3 hours per week, to be taken simultaneously with [ENGR 224](#).

ENGR 300 - Introduction to Robotics

(3cr) The course uses a hands-on approach to introduce the basics of modeling, design, programming and control of mobile robot systems. The course introduces fundamental concepts in robotics, including controllers, drive systems, motion, sensors and vision systems, and robotics programming. The format of this course includes lectures, research and reading assignments, and numerous hands-on team experiments using interactive robots that can communicate with humans and other objects using sensors and actuators controlled by developed software apps running inside a microcontroller. Prerequisites: Permission of instructor.

ENGR 489 - Engineering Capstone Project I

(1 cr) Students learn methods and skills for the engineering design process, demonstrate the ability to explore principles of engineering experimentation and design, identify real world projects in multidisciplinary engineering areas, and develop a practical plan to complete the projects (individual and/or group). Approved written project proposals and oral presentations are required at the end of the semester. The written proposal should include problem descriptions, objectives, selected approach, design alternatives, equipment requirements, and time line, as well as ethical, legal, and environmental issues. Pass/fail grade. Prerequisites: Junior or senior standing and permission of instructor.

ENGR 490 - Engineering Capstone Project II

(2 cr) Students develop and complete the proposed projects by utilizing the knowledge and experience gained from previous courses and by demonstrating the analyses and experiments. Student are required to present work in a professional manner which consists of three parts: comprehensive written reports including research and analysis, oral presentations, and operating working models. *Previously offered as 3 credits.* Prerequisites: [ENGR 489](#).

CIS Requirements, 21 Hours

CIS 104 - Introduction to Computer and Information Sciences

(3 cr) Provides an overview of the wide range of topics in computer and information sciences. Topics include computer number systems and theory of computation, computer hardware and organization, computer languages, programming, compilation, systems analysis and design,

decision support, artificial intelligence, as well as ethical, global, and social issues.
Prerequisite/corequisite: [MATH 105](#), or math placement.

CIS 211 - Computer Language Concepts

(3 cr) A first course in the fundamentals of computer programming using an object-oriented programming. Includes basic data types, problem solving and algorithm design methods, program design, coding, testing, and debugging. Students learn the programming characteristics of subprograms, parameter passing, and modularity. Includes formal laboratory session. *Previously 4 credits.* Prerequisites: [CIS 104](#), and [MATH 155](#) or [MATH 154](#) or [MATH 108](#).

CIS 287 - System Analysis and Design

(3 cr) The system life cycle, starting with the requirements statement and ending with system extinction/replacement. Primary emphasis on the logical design phase of an information system. Includes explanations of both the traditional design approach and prototyping. Advantages and disadvantages of both approaches are examined. Prerequisites: [CIS 211](#).

CIS 314 - Advanced Computer Language Concepts

(3 cr) This course examines object-oriented programming and its use in software development. Topics include object-oriented design, classes and objects, code reusability, data hiding, polymorphism and inheritance. *Previously 4 credits.* Prerequisites: [CIS 211](#).

CIS 321 - Data and File Structures

(4 cr) The topics in this course include definitions and implementations of basic data structures including linked lists, stacks, queues, trees, and graphs and their applications; recursion as a algorithm design tool; and file organization and access techniques. Prerequisites: [CIS 314](#); [MATH 254](#); and [MATH 205](#) or [207](#); or permission of instructor.

CIS 418 - Management Information Systems

(3 cr) An integration of the material covered in previous programming and systems courses. An examination of modern management information systems in a business setting. Topics include structured decision systems, decision support systems, information systems acquisition and management, database management systems, and the role of information processing systems in business decisions. Prerequisites: [CIS 287](#).

CIS 486 - Network Security

(4 cr) Students will learn how to protect computer networks from internal and external digital threats by studying security concepts and techniques. Topics include fundamental concepts of cryptography, cryptographic key distribution and management, authentication protocols, digital

signatures, security policy, virtual private networks (VPNs) and their implications to security, and protection of Internet and Web-based systems and services. Weekly hands-on laboratories will investigate computer network security techniques. Prerequisites: [CIS 423](#) or permission of instructor.

Elective Courses, 7 Hours

ENGR 241 - Engineering Statics

(3 cr) Examines engineering applications of equilibrium of forces, vector operations, couple and moment of force, resultants (2 and 3 dimensions), center of gravity and center of pressure, static friction, freebody diagrams, equilibrium trusses and frames. Prerequisites: [ENGR 101](#). Corequisite: [MATH 207](#).

ENGR 242 - Engineering Dynamics

(3 cr) A course examining Newtonian dynamics of particles and rigid bodies: engineering applications of equations of motion, work and energy, conservative forces, impulse and momentum, impulsive forces, acceleration in several coordinate systems, and relative motion. Prerequisites: [ENGR 241](#), [MATH 207](#), and [PHYS 221](#).

ENGR 305 - Digital Logic Design and Lab

(4 cr) Topics include the logic gates and integrated circuits, design of Boolean logic and finite state machines, simplifications methods, combinational circuits and networks, programmable logic and devices (PLDs), registers and counters, memory elements, Mealy and Moore machines, and analysis and design of sequential circuits. Laboratory projects include combinatorial and sequential logic design using logic gates and PLDs, and simulation and implementation using hardware description language (HDL). Prerequisites: [ENGR 102](#) or [MATH 254](#) or permission of instructor.

ENGR 326 - Linear Systems

(3 cr) Signal types, linearity, causality, linear differential and difference equations, zero state response, zero input response, discrete time, continuous time, convolution, correlation, Laplace transforms, transfer functions, pole-zero placement, initial value theorem, final value theorem, Z-transforms, sampling, frequency domain analysis. Prerequisites: [ENGR 224](#), [MATH 310](#).

CIS 310 - Information Security

(3 cr) Students will be introduced to fundamental concepts of information security including the establishment and implementation of an organization-wide security policy which is designed to protect the information assets of an organization. This course provides the student with the skills necessary to enforce an organization security policy and lays the foundation for continued

study in the areas of information security. Prerequisites: [CIS 234](#).

CIS 388 - Database Management Systems

(4 cr) The design and maintenance of a computerized database management system. Includes all operations such as design, creation, searching, sorting, and editing that must be performed on both sequential and direct access files and sets of files. Examines advantages and disadvantages of tree, network, and relational data structures. Coverage of query languages, data dictionaries, and security and privacy considerations. Prerequisites: [CIS 211](#).

CIS 390 - Operating Systems

(3 cr) An introduction to the fundamentals of operating systems across computing platforms. Topics include process and storage management, protection and security, and distributed systems. Format principles are complemented with surveys of contemporary operating systems (including UNIX). Prerequisites: [CIS 386](#).

CPE 234 - Introduction to Networking

(3 cr) Students will learn the fundamental concepts of networking. Case studies and hands-on projects will consider networking topics including hardware, protocols, architecture, media, design, implementation, and troubleshooting, maintaining, and upgrading computer networks. Prerequisites: [CIS 104](#).

CPE 386 - Computer Organization

(4 cr) Students will learn the principles of computer organization. Topics include the functional components of a computer, memory organization, auxiliary storage, system interconnection, digital logic, assembly language programming, and evolution and future trends of computer organization. Weekly laboratories will illustrate computer organization concepts and techniques. Prerequisites: [CIS 211](#) and [CPE 234](#).

CPE 433 - Microprocessor System Design and Lab

(4 cr) This course is a basic introduction to microprocessor/microcontroller programming using the INTEL 80xxx series of microprocessor/microcontrollers. The course has a strong lab component where students will be exposed to programming the INTEL 80xxx series microprocessors in addition to learning their basic architecture. Topics include Assembly language programming, instruction time cycles, memory interfacing, input-output interfacing, data converters A/D and D/A, interrupts, general purpose programmable peripherals, etc. If time permits, students will be asked to do a lab project in which the microprocessor/microcontroller is used in a real-life application, e.g., a digital thermometer.

Prerequisites: [ENGR 305](#) and [CPE 386](#).

CPE 482 - Real Time and Embedded System Design

(3 cr) A general introduction to real-time operating systems and embedded system design.

Prerequisites: [CPE 421](#).

DATA 418 - Big Data Analytics

(3cr) This course introduces students to concepts, methods and tools used in the analysis and management of massive data sets. Topics will include the map-reduce programming paradigm, cluster analysis, algorithms and libraries for working with large graphs, disk-based and memory-based distributed computing, stream processing, large-scale machine learning, and analysis of distributed algorithms. The course will explore the historical context, current relevance, and future growth of data analytics.

Prerequisites: One from [CIS 234](#), [CIS 324](#), or [CIS 388](#); AND one from [MATH 318](#), [MATH 329](#), or [MATH 354](#).

Appendix B: Course Descriptions

Environmental Engineering Concentration

The following course descriptions are found in Shepherd University's online catalog:
catalog.shepherd.edu.

Curriculum for Engineering Science – Environmental Engineering Concentration **Specific Core Curriculum Requirements, 16 Hours**

ENGR 100 - Freshman Seminar

(1 cr) This course provides beginning freshman students with information and tools to prepare them for a successful life as a student. This course is aimed at developing the cognitive skills required in computer, mathematics, and engineering courses. The activities in this course are designed to introduce the student to an academic support system through which freshman students can explore various concentrations in computer science, mathematics, and engineering and learn academic success strategies including developing a support network. This course also helps students develop good wellness habits that have lifelong benefits. One pass/fail credit. **CORE CODE: FY**

ECON 205 - Principles of Macroeconomics

(3 cr) Introduction to fundamental economic concepts including production possibilities and economic growth, market supply and demand analysis, money, banking, and government fiscal and monetary policies. Emphasis is placed upon fluctuations in national income, employment, and the price level. Prerequisites: Qualifying Mathematics placement scores of ACT 19 or SAT 460; or MATH 101 or higher. **CORE CODES: SO CK GL**

MATH 207 - Calculus I

(4 cr) Fundamental concepts of calculus, using analytic geometry. After preliminaries about the real number system, intervals, and functions, properties of limits are carefully stated. These are used to develop standard differentiation formulas. Applications of the derivative (as a rate of change) are stressed in a wide variety of problems. Introduction to integration via anti-differentiation and area and the fundamental theorem. Applications of the integral (volumes, arc length, surface area, etc.) Prerequisites: **MATH 108** or satisfactory math placement score. **CORE CODES: MA**

ENVS 201 - Foundations In Environmental Science I

(3cr) This course introduces fundamental concepts in environmental studies, with specific focus on human impacts on ecosystem function and biotic interactions. Students explore interactions between humans and earth's biotic resources, examining topics such as ecosystem conservation, population growth and regulation, food production and pest control. Anthropogenic environmental issues such as biodiversity decline, soil degradation and environmental toxicology and related governmental policies are explored within a social framework that considers both the different environmental impacts and experiences of humans

based on geographical region and culture. Corequisite: [ENVS 201L](#), or permission of Department Chair. **CORE CODES: LS**

ENVS 201L - Foundations In Environmental Science I Lab

(1cr) A two hour per week laboratory course focusing on field techniques, equipment and scientific methodologies used in environmental studies, including such topics as microscopy, organism classification, experimental design and interpretation, ecological footprints, biodiversity and food web analysis. Corequisite: [ENVS 201](#), or permission of Department Chair. **CORE CODES: LS**

ENVS 202 - Foundations In Environmental Science II

(3cr) This course introduces fundamental concepts in environmental studies, with specific focus on energy, earth systems and human resource utilization. Students explore interactions between humans and earth's abiotic resources, examining topics such as natural resource extraction, renewable and non-renewable energy production, hydrologic resource use and associated global environmental impacts. Human-induced environmental issues such as global climate change, non-renewable resource consumption and toxic and solid waste production are discussed, as well as key governmental policies around these issues. Concepts are framed within a social context that reveals how humans of different cultures and geographical regions both contribute to and experience various environmental problems differentially. *Previously titled Dimensions of Environmental Science II (4cr)*. Corequisite: [ENVS 202L](#), or permission of Department Chair. **CORE CODES: LS**

ENVS 202L - Foundations In Environmental Science II Lab

(1cr) A two hour per week laboratory course focusing on field techniques, equipment and scientific methodologies used in environmental studies, including topics such as scientific measurements, energy conversions and calculations, use of topographic maps, compass, and multimeter, water quality analysis, electrical generators, solar and wind power. Corequisite: [ENVS 202](#), or permission of Department Chair. **CORE CODES: LS**

Environmental and Physical Science Requirements, 36 Hours

ENVS 341 - Sustainable Energy and Lab

(4 cr) This course introduces concepts of energy conservation and management and explores different renewable energy sources that are considered environmentally sustainable. Problems associated with nonrenewable energy use will be examined, and the range of sustainable alternatives will be explored. The fundamentals of passive solar collection, photovoltaics, wind, hydro, geothermal, and biomass will be covered. Economic and social implications for adopting each technology also will be considered. Prerequisites: [ENVS 201](#) and [202](#) (including labs).

ENVS 390 - Geographic Information Systems

(4 cr) An introductory course into the many varieties of remote sensing employed within the environmental sciences and applications of these techniques to field analysis. The course will focus on application of Geographic Information Systems (GIS) to the environmental sciences. These systems employ computers to store, retrieve, transform, and display spatial environmentally oriented data and have a myriad of applications in environmental studies. Remote sensing is typically employed in environmental analyses, ranging from land use to wetlands characterization, requiring the environmental studies student's awareness of these frequently applied techniques. Prerequisites: [ENVS 201](#) and [ENVS 202](#) (including labs), or [BIOL 208](#) and [BIOL 209](#).

ENVS 441 - Hydrology and Lab

(4 cr) This course will focus on the dynamic nature of earth's surface and subsurface waters and the impact of human exploitation of these water resources. Techniques for monitoring and analyzing both surface and subsurface waters will be presented and practically applied as part of the laboratory component. Water quality standards and the criteria on which these standards are based will also be addressed in this course. Coursework assumes knowledge of basic algebra. Prerequisites: [ENVS 201](#) and [ENVS 202](#) (including labs), or [BIOL 208](#) and [BIOL 209](#).

PHYS 221 - General Physics I

(3 cr) A calculus-based treatment of fundamentals of selected classical physics topics including motion, force, Newton's laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. [PHYS 221L](#) must be taken concurrently with PHYS 221. Prerequisite/corequisite: [MATH 207](#).

PHYS 221L - General Physics I Laboratory

(1 cr) A two hour per week laboratory course focusing on selected classical physics topics including motion, force, Newton's laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. Corequisite: Must be taken concurrently with [PHYS 221](#).

PHYS 222 - General Physics II

(3 cr) A calculus-based treatment of the fundamentals of selected classical and modern physics topics including acoustics, fluid dynamics, thermodynamics, electromagnetism, optics, relativity, and quantum mechanics. Prerequisites: [PHYS 221](#). Corequisite: [PHYS 222L](#) must be taken concurrently with PHYS 222. **CORE CODES: LS**

PHYS 221L - General Physics I Laboratory

(1 cr) A two hour per week laboratory course focusing on selected classical physics topics

including motion, force, Newton's laws, energy, momentum, gravitation, rotation, acoustics, fluid dynamics, and thermodynamics. Corequisite: Must be taken concurrently with [PHYS 221](#).

PHYS 301 - Energy

(4cr) In this course students will learn fundamentals of how energy is converted from one form to another and utilized to do useful work. These fundamentals are essential to our energy-intensive civilization and important for understanding humankind's impact on the environment and utilization of natural resources. Topics will include thermodynamics processes, heat engines, heat transfer, electromagnetic induction, nuclear physics, and the photoelectric effect. *Previously titled Physics of Energy (3cr)*. Prerequisites: Any 4-credit Core Curriculum science class, or Permission of Instructor.

CHEM 207 - General Chemistry I

(3 cr) CHEM 207 and its companion lab, CHEM 207L, are the first part of a two-semester sequence that serves as an introduction to modern chemistry for students majoring in the sciences. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include measurements and units, atomic and molecular structure, periodic properties of the elements, chemical bonding, stoichiometry, chemical reactivity, thermochemistry, and the structure and properties of gases, liquids and solids. This course, along with [CHEM 207L](#), [CHEM 209](#), and [CHEM 209L](#), fulfills the Core Curriculum Laboratory Sciences requirement. Prerequisites: Background in high school chemistry and algebra. Corequisite: **It is recommended, but not required, that [CHEM 207L](#) be taken concurrently.** **CORE CODES: LS**

CHEM 207L - General Chemistry I Laboratory

(1 cr) CHEM 207L is a laboratory course that is designed to accompany CHEM 207. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include measurements and units, basic laboratory techniques, quantitative analysis, qualitative analysis, spectrophotometric analysis, gravimetric analysis, stoichiometry, thermochemistry and chromatography. This course, along with [CHEM 207](#), [CHEM 209](#), and [CHEM 209L](#), fulfills the Core Curriculum Laboratory Sciences requirement. Prerequisites: Background in high school chemistry and algebra. Corequisite: **It is recommended, but not required, that [CHEM 207](#) be taken concurrently.**

CHEM 209 - General Chemistry II

(3 cr) CHEM 209 and its associated lab, CHEM 209L, are the second part of a two-semester sequence that serves as an introduction to modern chemistry for students majoring in the

sciences. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include equilibrium, acid-base chemistry, solutions and solubility, electrochemistry, chemical kinetics, nuclear chemistry and an introduction to organic chemistry. This course, along with [CHEM 207](#), [CHEM 207L](#), and [CHEM 209L](#), fulfills the Core Curriculum Laboratory Sciences requirement.

Prerequisites: [CHEM 207](#). Corequisite: **It is recommended, but not required, that [CHEM 209L](#) be taken concurrently.** **CORE CODES: LS**

CHEM 209L - General Chemistry II Laboratory

(1 cr) CHEM 209L is a laboratory course that is designed to accompany CHEM 209. The course provides a basis for, and is a prerequisite for, advanced courses in chemistry, biochemistry and molecular biology. Science majors, premedical and other pre-professional students should take this course. The topics covered include volumetric analysis, chromatography, spectroscopy, acid-base chemistry, electrochemistry, colligative properties and organic and inorganic synthesis. This course, along with [CHEM 207](#), [CHEM 207L](#), and [CHEM 209](#), fulfills the Core Curriculum Laboratory Sciences requirement. Prerequisites: [CHEM 207](#) and [CHEM 207L](#). Corequisite: **It is recommended, but not required, that [CHEM 209](#) be taken concurrently.**

CHEM 333 - Environmental Chemistry

(3 cr) CHEM 333 is a course for students interested in the chemical aspects of the environment. This course is intended for chemistry, environmental science and biology majors. Environmental Chemistry is a one-semester survey course that includes many topics. These include studies of the chemistry of the upper and lower atmosphere, the greenhouse effect, the chemistry of ground and surface water, energy use and its consequences, important organic and inorganic environmental toxins, and waste management. Prerequisites: [CHEM 209](#). Corequisite: It is recommended, but not required, that [CHEM 333L](#) be taken concurrently.

CHEM 333L - Environmental Chemistry Lab

(1 cr) CHEM 333L is a one-credit laboratory course covering analytical techniques important to environmental testing. Particular emphasis is placed on methods for water and soil analysis. Volumetric, electrochemical, chromatographic and spectroscopic techniques are covered. Students learn how to prepare samples and how to make accurate and precise measurements. Particular attention is given to data analysis and evaluation of data. Prerequisites: [CHEM 209L](#). Corequisite: It is recommended, but not required, that [CHEM 333](#) be taken concurrently.

Mathematics and Engineering Requirements, 42 Hours

ENGR 101 - Engineering I

(3 cr) Topics include developing engineering design and problem-solving techniques including group projects and team work, basic engineering design concepts; spreadsheet programming; MathLab, dimensional analysis, use of computer, data, analysis, design, design process, visualization, material science, vector analysis, technical report writings and engineering ethics, professional and ethical responsibilities; and technical library and internet research.

Prerequisites: [MATH 108](#).

ENGR 102 - Engineering II

(3 cr) Topics include an introduction to computing environments for solving engineering problems including computer-aided engineering (CAE), mathematical packages, and structured programming processes including algorithms, pseudo code, and editing and debugging with the C++ programming language. Applications include topics from numerical analysis and graphical representations. Corequisite: [MATH 207](#).

ENGR 221 - Introduction to Electrical Engineering

(3 cr) Topics include electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, energy storage elements, RC and RL circuits, unit step response, and second order circuits. Prerequisites: [ENGR 102](#) and [MATH 207](#).

ENGR 222 - Electrical Engineering Laboratory

(1 cr) A laboratory course in electrical engineering, 3 hours per week, to be taken simultaneously with [ENGR 221](#).

ENGR 241 - Engineering Statics

(3 cr) Examines engineering applications of equilibrium of forces, vector operations, couple and moment of force, resultants (2 and 3 dimensions), center of gravity and center of pressure, static friction, freebody diagrams, equilibrium trusses and frames.

Prerequisites: [ENGR 101](#). Corequisite: [MATH 207](#).

ENGR 242 - Engineering Dynamics

(3 cr) A course examining Newtonian dynamics of particles and rigid bodies: engineering applications of equations of motion, work and energy, conservative forces, impulse and momentum, impulsive forces, acceleration in several coordinate systems, and relative motion.

Prerequisites: [ENGR 241](#), [MATH 207](#), and [PHYS 221](#).

ENGR 243 - Engineering Mechanics of Materials

(3 cr) Analysis of stress, deformation, and failure of solid bodies under the action of forces including internal force resultants, stress, strain, Mohr's Circle, mechanical properties of engineering materials, generalized Hooke's Law, analysis of axial, bending and buckling loads, and combinations. Prerequisites: [ENGR 241](#) and [MATH 207](#).

ENGR 301 - Engineering Thermodynamics

(3 cr) Basic thermodynamic concepts, properties of pure substances, First and Second Law analysis of systems and control volumes are examined. Prerequisites: [MATH 207](#) and [PHYS 221](#).

ENGR 351 - Introduction to Fluid Mechanics

(3 cr) This course will examine fluid statics, laminar and turbulent flow of compressible and incompressible fluids, flow measurements, open channel flow, and kinetics of fluids.

Prerequisites: [MATH 310](#) and [ENGR 242](#).

MATH 208 - Calculus II

(4 cr) Continuation of MATH 207. Calculus of exponential, logarithmic, and trigonometric functions; techniques of integration. Review of conic sections in standard form and in rotation. Polar coordinates, l'Hôpital's rule, improper integrals, infinite series, and Taylor series.

Prerequisites: [MATH 207](#).

MATH 307 - Introduction to Linear Algebra

(3 cr) The course begins with a study of linear systems, using matrices and determinants to solve them. Vector spaces are treated axiomatically and discussed geometrically. Linear transformation of vector spaces and their matrix representations are considered. Finally eigenvectors and eigenvalues are considered with applications.

Prerequisites: [MATH 155](#) or [MATH 254](#), and [MATH 207](#) or [MATH 205](#).

MATH 310 - Differential Equations

(4 cr) Examines first order ordinary differential equations (e.g., exact, separable, Bernoulli, homogeneous), direction field, numerical solution; higher order equations including the methods of Lagrange and undetermined coefficients; Laplace transforms; systems of first order equations; introduction to Fourier series; and applications in the physical and biological sciences. Prerequisites: [MATH 208](#), and [MATH 307](#).

MATH 314 – Statistics

(3 cr) This is a first course in statistics, primarily for those needing knowledge of statistical methods and the interpretation of statistical data. It discusses basic probability ideas, then

deals with frequency distributions, measures of central tendency and dispersion; hypothesis testing using z, t, and chi-square tests; correlation, linear regression, and one-way ANOVA. For reinforcement, students must complete several laboratory assignments using statistical software. Students may not receive credit for both this course and [BADM 224](#). Prerequisites: [MATH 105](#) or permission of chair.

MATH 329 - Mathematical Modeling

(3 cr) A study of how to model the world around us using mathematics, how to solve the resulting equations, and how to apply the results. Includes a thorough study of how to use both quantitative and qualitative solution behavior in the modeling process.

Prerequisites: [MATH 318](#), [MATH 321](#), and [MATH 310](#).

CPE 492 - Cooperative Work Experience in Computer Science and Engineering

(1-3 cr) A supervised work experience in which the student is employed in an approved professional position with an industry, firm, or government agency. A final written report and a presentation are required. May be repeated to a maximum of 3 credits. Pass/fail grading only.

Prerequisites: [CIS 392/CPE 392](#) with a pass grade and positive comments from both the faculty and on-site advisors; 3.0 GPA in the major; 2.3 GPA overall; and the recommendation of the student's advisor.

ENGR 489 - Engineering Capstone Project I

(1 cr) Students learn methods and skills for the engineering design process, demonstrate the ability to explore principles of engineering experimentation and design, identify real world projects in multidisciplinary engineering areas, and develop a practical plan to complete the projects (individual and/or group). Approved written project proposals and oral presentations are required at the end of the semester. The written proposal should include problem descriptions, objectives, selected approach, design alternatives, equipment requirements, and time line, as well as ethical, legal, and environmental issues. Pass/fail grade. Prerequisites:

Junior or senior standing and permission of instructor.

ENGR 490 - Engineering Capstone Project II

(2 cr) Students develop and complete the proposed projects by utilizing the knowledge and experience gained from previous courses and by demonstrating the analyses and experiments. Student are required to present work in a professional manner which consists of three parts: comprehensive written reports including research and analysis, oral presentations, and operating working models. *Previously offered as 3 credits.* Prerequisites: [ENGR 489](#).

CORE CODES

CORE CODES appear throughout the *Catalog* and the semester *Schedule of Classes* (both print and on-line) to identify courses that have been approved to satisfy requirements within the Core Curriculum of the university. Consult with your advisor as to specific Core Curriculum requirements that may be designated within your academic program.

Code	Description	Tier/Requirement
AR	Arts	Tier Two (3 credits)
CK	Civic Knowledge and Engagement	Tier Two (courses must include one with this code)
CP	Capstone	Tier Three (required in major)
FY	First-Year Experience	Tier One (minimum 1 credit)
GL	Global Awareness	Tier Two (courses must include one with this code)
HM	Humanities	Tier Two (6 credits)
LS	Lab Science	Tier One (complete a full 8-credit sequence of the same science)
MA	Mathematics	Tier One (3-4 credits)
MD	Multiculturalism and Diversity	Tier Two (courses must include one with this code)
SO	Social Sciences	Tier Two (9 credits)
WE	Wellness	Tier Two (3 credits)
WM	Writing in the Major	Tier Two (required in major)

Appendix C: Course Syllabi

Appendix D: Faculty Vitae

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Approval of the Master of Arts in Clinical Psychology

INSTITUTION: West Liberty University

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the Master of Arts in Clinical Psychology program at West Liberty University, effective fall 2018. This approval expires two years from the date of Commission approval if the program is not fully implemented at that time.

STAFF MEMBER: Corley Dennison

BACKGROUND:

The Master of Arts in Clinical Psychology is a 54-credit hour program with 30 credit hours of course work, 6 hours of practicum and 18 credit hours of internship. This program will qualify graduates to pursue licensure in the state of West Virginia or pursue doctoral-level graduate education. The coursework and practicum are intended to be completed over four semesters with a course load of nine credit hours per semester. The internship is completed in the third year to prepare students for licensure eligibility. The practicum and internship experience are consistent with requirements from the West Virginia Board of Examiners of Psychology and prepares students to pass the Examination for Professional Practice of Psychology (EPPP). The state of West Virginia allows licensure for those holding the master's degree in psychology.

There is currently no stand-alone Master of Arts in Clinical Psychology program in West Virginia. The two most closely related programs are at the two research universities. West Virginia University offers a master's in Applied Behavioral Analysis and awards a master's in Clinical Psychology and Counseling Psychology within the context of obtaining the doctorate degree. Marshall University offers a master's in Counseling and a doctorate in Psychology.

West Virginia has 575 active psychology licenses and is experiencing a shortage of providers in rural areas including several counties in the northern panhandle. Hancock and Tyler Counties have no licensed psychologists while Brooke, Marshall, and Wetzel Counties each only have one licensed psychologist. There are 11 counties in West Virginia with no licensed psychologist.

The Bureau of Labor Statistics predicts employment of psychologists will grow 19

percent between now and 2024. The U.S. Department of Labor projects the rate of job growth for clinical, counseling and school psychologists will grow 20 percent between now and 2024.

West Liberty University is asking for no additional resources to begin this program as expenses are to be covered with tuition, lab fees and internal allocations. Library, classroom and instruction resources are adequate. The program will require the hiring of one additional faculty member holding a doctorate in psychology and holding a license to practice psychology in West Virginia. West Liberty University currently has three full-time faculty members in psychology and one administrator teaching one course per semester. Of the four faculty/administrator's currently teaching, two hold a psychology doctorate (psyD), one holds a Ph.D. in psychology and one holds a Master of Science.

Enrollment projections are for 12 students in the first year and 22 students by the second year. The projected sustained enrollment is 22 students. Applications are due by May 1 for the fall semester. Applicants are urged to apply early and submission does not guarantee acceptance into the program. Admission is on a competitive basis. Continued status in the program requires a minimum GPA of 3.0 and consistent coursework progress. All classes, including the internship must be completed within five academic years.

The following is recommended:

- The Master of Arts in Clinical Psychology program be approved for implementation in fall of 2018.
- If the program is not fully implemented by February 2019, the program will no longer be considered approved by the West Virginia Higher Education Policy Commission and must be resubmitted for review and approval.
- In the 2021-2022 academic year, the Commission will conduct a post-audit review of the program to assess progress toward successful implementation.

New Program Proposal

Master of Arts in Clinical Psychology

West Liberty University
West Liberty, WV



Submission Date: Fall 2016
Effective Date: Fall 2018

Brief Summary Statement: This document supports our request for approval to offer a Master of Arts in Clinical Psychology outlined in Title 133 Procedural Rule of the West Virginia Higher Education Policy Commission, Series 11. Approval of our Intent to Plan was documented in a letter from Paul Hill, Chancellor, on May 11, 2016.

The proposed M.A. in Clinical Psychology is a 54 credit hour degree program that provides a high quality, affordable, and accessible graduate program for qualified students in the northern panhandle, the state of West Virginia, and the surrounding areas. The program is intended to provide opportunities for three distinct groups: 1) traditional and non-traditional students seeking to professionally practice as licensed psychologists in the state of West Virginia, 2) those wishing to pursue a doctorate in psychology or related fields, and 3) mental health practitioners already working in the field who have previously completed their bachelor's degree and are seeking advancement in their respective occupations. The proposed master's degree program enables those qualified individuals to advance their knowledge and skills while providing a much-needed service to the West Virginia northern panhandle as well as the rest of the state.

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6.2. Program Description

The M. A. in Clinical Psychology is a 54 credit hour degree program which consists of 30 credit hours of coursework, 6 credit hours of practicum and 18 credit hours of professional internship for students who have previously completed their bachelor's degree. This program will qualify graduates to pursue licensure in the state of West Virginia or to pursue further graduate education in psychology.

6.2.a. Program Objectives:

The WLU Master of Arts in Clinical Psychology program has identified program objectives and objective components for each of the four core competencies. These Program Objectives will be introduced, reinforced, and applied throughout this graduate program. Program objectives are organized around the core competencies of the National Council of Schools and Programs in Professional Psychology (NCSP).

Required Courses (see course descriptions below)	Program Objectives			
	Professionalism	Relational Skills	Science	Application
	Graduates will demonstrate professional values in their application of psychological principles.	Graduates will relate effectively and meaningfully with individuals, groups, and/or communities	Graduates will apply scientific methods to clinical practice	Graduates will apply research and clinical expertise to client care.
520	I	I	I	I
525	R	R	R	I
530	I	I	I	I
535	R	R	R	I
540	I	I	I	I
541	R	R	R	I
542	R	R	R	R
543	R	R	R	I
550	R	R	R	I
560	A	A	R	R
561	A	A	A	A
562	A	A	A	A
563	A	A	A	A

I = Objective Introduced R=Objective Reinforced A=Objective Applied

6.2.b. Program Identification:

CIP 42.0204 Clinical Psychology. A program that prepares individuals for the independent professional practice of clinical psychology, involving the analysis, diagnosis, and clinical treatment of psychological disorders and behavioral pathologies. Includes instruction in clinical assessment and diagnosis, personality appraisal, psychopathology, clinical psychopharmacology, behavior modification, therapeutic intervention skills, patient interviewing, personalized and group therapy, child and adolescent therapy, cognitive and behavioral therapy, supervised clinical practice, ethical standards, and applicable regulations. (Occupational Crosswalk)

6.2.c. Program Features:

Students in the Master of Arts in Clinical Psychology will complete 30 credits of master's level psychology coursework, plus 6 credits hours of practicum work and 18 credits of supervised internship. The coursework and practicum are intended to be completed over four semesters with a course load of nine credit hours per semester. An additional internship course sequence will be completed in the 3rd year to prepare students for license eligibility. The practicum and internship experiences are consistent with the licensure requirements of the West Virginia Board of Examiners of Psychology and will prepare students to pass the Examination for Professional Practice of Psychology (EPPP), which is required in West Virginia for graduates to be licensed as Supervised Psychologists.

6.2.c.1. Admissions and Performance Standards:

Applications to the program are due by May 1st for the fall semester. Application submission does not guarantee acceptance into the program and students are urged to apply early.

To apply, all students must first complete and return the Graduate Application for Admission to the Graduate Admissions Office at West Liberty University to be considered for admission to the M.A. program. All applicants must provide a complete application file which contains the following items to be submitted in one packet to the Graduate Admissions Office:

Official transcripts of any bachelor's degree from a regionally accredited college or university, with a GPA of at least 3.0 on a 4.0 scale

Three letters of recommendation. Letters should be from professional references who can attest to the applicant's ability to succeed in graduate coursework and his or her work ethic and performance.

A statement of the applicant's expectations of the graduate program indicating how earning the MA in Clinical Psychology will enhance his or her career goals

A professional resume or curriculum vitae

Scores from either the Graduate Records Examination (GRE) Subject Test in Psychology or the Major Field Test in Psychology completed within the last two years. Minimum score on either measure should be at the 60th percentile.

A score of at least 550 on the Test of English as a Foreign Language (TOEFL) if an applicant is from a country where English is not the only official language. The test must have been taken within the last two years.

Students should be aware that admission to the graduate program is not guaranteed and is granted on a competitive basis. Students may meet the minimum requirements but may be denied admission based on such factors as program capacity or academic discretion.

Up to 9 credit hours can be transferred from a qualifying graduate program and students will be required to demonstrate mastery of the course content.

Continued status in the program requires a minimum GPA of 3.0 and consistent coursework progress. All classes, including practicum and internship, must be completed within 5 academic years. Students who take a leave of absence will join the next available cohort. Reapplication may be necessary if the total leave extends beyond 2 academic years.

A grade of “C” in one course will require remediation. A grade of “C” in two courses will result in dismissal from the program.

Students will be required to successfully complete an oral clinical defense prior to internship, which will consist of work samples in the area of therapy and assessment, and a dispositional appraisal.

6.2.c.2. Program Requirements:

Students in the proposed degree program will complete 30 credits of master’s level psychology coursework with a minimum GPA of 3.0, plus 6 credits hours of practicum work and 18 credits of supervised experience. The practicum and internship requirements are consistent with licensure prerequisites from the West Virginia Board of Examiners of Psychology. This program will prepare students to pass the Examination for Professional Practice of Psychology (EPPP), which is necessary in West Virginia for graduates to be licensed as Supervised Psychologists.

Curriculum: Coursework will consist of:

- CPSY 520 Lifespan Development (3 credits)
- CPSY 525 Multicultural & Rural Psychology (3 credits)
- CPSY 530 Research Methods (3 credits)
- CPSY 535 Biological Bases of Behavior (3 credits)
- CPSY 540 Clinical Assessment I (3 credits)
- CPSY 541 Psychopathology and Diagnosis (3 credits)
- CPSY 542 Clinical Assessment II (3 credits)
- CPSY 543 Individual Psychotherapy and Tx Planning (3 credits)
- CPSY 550 Substance Abuse Treatment (3 credits)
- CPSY 555 Legal, Ethical, and Prof. Issues in Psychology (3 credits)
- CPSY 560 Clinical Practicum I (3 credits)
- CPSY 561 Clinical Practicum II (3 credits)
- *CPSY 562 Clinical Internship I (6 credits)
- *CPSY 563 Clinical Internship II (6 credits)
- *CPSY 564 Clinical Internship III (6 credits)

*Prior to internship, students will be required to successfully complete an oral clinical defense and a dispositional appraisal.

Course Descriptions and Learning Outcomes:
PSYC 520 – Developmental Psychology
3 Credit Hours

Description: A comprehensive biopsychosocial overview of the human lifespan from prenatal development until death, including appropriate research methods and designs. Application of theories and recent research outcomes in a therapeutic setting will be emphasized.

- Learning Outcomes:** As a result of this course, students will
- Apply the major developmental theories that frame psychologists' understanding of the lifespan
 - Describe the developmental needs and issues for individuals at different life stages
 - Recognize the normative and non-normative factors that influence individual development over the lifespan, such as culture, family, genetics, education, peers, and environment
 - Summarize recent research findings in the field of lifespan development
 - Apply appropriate research methods and ethical standards for developmental psychology
 - Anticipate precipitating factors in problematic development

PSYC 525--Multicultural and Rural Psychology
3 Credit Hours

Description: An exploration of the ways that culture, race, and community influence individual's behavior and cognitive perspectives. Issues concerning the assessment and treatment of diverse populations will be covered with an emphasis on rural communities.

- Learning Outcomes:** As a result of this course, students will
- Formulate strategies for working with clients within their cultural framework
 - Reflect on the impact culture has on students' own behavior, cognitions and affect
 - Evaluate designs' and methodologies suitability for cultural research
 - Explain privilege and describe its consequences in society

- Differentiate between urban and rural settings and their corresponding therapeutic approaches and cultural understandings

PSYC 530 - Research Methods

3 Credit Hours

Description: Investigation of common research designs and statistical analysis techniques used in social science research. Topics will include variable identification, sampling techniques, experimental and nonexperimental designs, methods of control, descriptive statistics, statistical inference, hypothesis testing, parametric and nonparametric tests, correlational techniques, and multivariate techniques.

Learning Outcomes: As a result of this course, students will

- Describe advantages and disadvantages of different research designs
- Interpret appropriate statistical techniques for a given example research scenario
- Conduct basic descriptive and inferential statistical analysis

PSYC 535 - Biological Basis of Behavior

3 Credit Hours

Description: Biological and neural basis of behavior, psychopharmacology, and methodologies supporting this body of knowledge. Emphasis is on the physical, anatomical, and chemical aspects of the nervous system and their relation to a variety of functions (i.e. learning, memory, and psychological disorders).

Learning Outcomes: As a result of this course, students will

- Explain the organization and functions of the nervous system with emphasis on the central nervous system
- Select appropriate drugs used in psychopharmacology for specific psychological diagnosis
- Differentiate neurological, physiological, and endocrine disorders

PSYC 540 – Clinical Assessment I

3 Credit Hours

Description: Clinical interviewing, psychometrics, assessment models, principles, and approaches with both children and adults. Administration, scoring, and interpretation of intellectual and achievement tests. Introduction to integrated report writing.

Learning Outcomes: As a result of this course, students will

- Describe assessment theories, models, and methods
- Administer, score and interpret intellectual and achievement tests
- Write integrated psychological reports
- Apply criteria for selection and adaptation of assessment methods

PSYC 541 Psychopathology and Diagnosis

3 Credit Hours

Description: Clinical case conceptualization, including integrating assessment, diagnosis, epidemiology of clinical disorders, and an introduction to treatment planning, based on current theory and research.

Learning Outcomes: As a result of this course, students will

- Differentiate psychological disorders in terms of their symptom criteria, base rates, cultural differences, and epidemiology.
- Develop well supported diagnoses, demonstrating understanding of factors influencing the interpretation of data and decision-making
- Develop basic clinical treatment plans.

PSYC 542 – Clinical Assessment II

3 Credit Hours

Description: Continued study of clinical interviewing, psychometrics, assessment models, principles and approaches with both children and adults. Administration, scoring, interpretation of personality and disorder-based assessments as well as integrative report writing will be covered.

Learning Outcomes: As a result of this course, students will

- Administer, score and interpret personality and disorder-based assessments
- Write integrated psychological reports
- Apply criteria for selection and adaptation of assessment methods

PSYC 543 Individual Psychotherapy and Treatment Planning
3 Credit Hours

Description: Clinical case conceptualization, including integrating assessment, diagnosis, epidemiology of clinical disorders, and an introduction to treatment planning, based on current theory and research.

Learning Outcomes: As a result of this course, students will

- Distinguish between psychological disorders in terms of their symptom criteria, base rates, cultural differences, and epidemiology.
- Develop well supported diagnoses, demonstrating understanding of factors influencing the interpretation of data and decision-making
- Write comprehensive clinical treatment plans.

PSYC 550 Substance Abuse Treatment
3 Credit Hours

Description: Epidemiological models of substance abuse and the current best practices for treatment. Cognitive behavioral therapy, motivational interviewing approaches, and systems theory will be highlighted.

Learning Outcomes: As a result of this course, students will

- Apply relevant theoretical approaches to the etiology of substance abuse
- Create treatment plans based on current best practices
- Demonstrate appropriate therapeutic techniques
- Evaluate the ongoing progress and attainment of therapeutic outcomes

PSYC 555: Legal, Ethical, and Professional Issues in Psychology
3 Credit Hours

Description: American Psychological Association's (APA) Ethical Principles of Psychologists and Code of Conduct and the legal requirements of the field. Additionally covers ethical decision making and preparation for professional licensure.

Learning Outcomes: As a result of this course, students will

- Delineate between ethical concerns and legal issues

- Evaluate the impact of state and federal laws on practice of clinical psychology
- Demonstrate the application of ethical principles and conduct to therapeutic and research settings
- Defend and justify ethical decisions using a comprehensive decision making model
- Summarize the necessary steps for psychology licensure

PSYC 560 Clinical Practicum I
3 Credit Hours

Description: This 240-hour practicum is the first course in a two-course sequence which introduces students to clinical training and supervised experience in the application of principles of therapy and assessment in a clinical setting. Diagnostic and therapeutic skills are practiced, and basic documentation skills are employed.

- Learning Outcomes:** As a result of this course, students will
- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
 - Display awareness of strengths, limitations, and area of growth as developing psychologists
 - Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
 - Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
 - Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
 - Evaluate and monitor treatment progress and outcomes

PSYC 561 Clinical Practicum II
3 credit hours

Description: This 240-hour practicum the second course in a two-course sequence which introduces clinical training and supervised experience in the application of principles of therapy and assessment in a clinical setting. Diagnostic and therapeutic skills are practiced, and basic documentation skills are learned.

- Learning Outcomes:** As a result of this course, students will
- Demonstrate knowledge, awareness, and behaviors

consistent with APA's ethical principles and agency policies of professional conduct

- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes
- Identify and complete all requirements necessary to prepare for Internship I.

**CPSY 562 Clinical Internship I:
6 credit hours**

Description: This internship provides advanced opportunities for students to perform, under supervision, in a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience will allow students to document progress toward the total requirement of internship hours necessary for licensure. Weekly supervision meetings are required.

- Learning Outcomes:** As a result of this course, students will
- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
 - Display awareness of strengths, limitations, and area of growth as developing psychologists
 - Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
 - Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
 - Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
 - Evaluate and monitor treatment progress and outcomes
 - Conduct risk assessments, implement risk management plans, and make client triage decisions.

CPSY 563 Clinical Internship II

6 credit hours

Description: This internship provides advanced opportunities for students to perform, under supervision, in a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience will allow students to document progress toward the total requirement of internship hours necessary for licensure. Weekly supervision meetings are required.

Learning Outcomes: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes
- Conduct risk assessments, implement risk management plans, and make client triage decisions.

CPSY 563 Clinical Internship III

6 credit hours

Description: This internship provides advanced opportunities for students to perform, under supervision, in a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience will allow students to document completion of the 2000 internship hours necessary for licensure. Weekly supervision meetings are required.

Learning Outcomes: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct

- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes
- Conduct risk assessments, implement risk management plans, and make client triage decisions.

6.2.d. Program Outcomes:

The Master of Arts in Clinical Psychology program has identified four specific program outcomes with related to the identified core competencies which will be assessed:

Professionalism: To produce graduates who understand the application of professional values to psychological principles

Relational Skills: To produce graduates who possess effective interpersonal skills

Science: To produce graduates who recognize how scientific methods relate to clinical practice

Application: To produce graduates who integrate research and clinical expertise in the context of client care

6.2.e. Program Content

6.2.e.1. Content and Length:

Students in the proposed degree program will complete 30 credits of master's level psychology coursework, plus 6 credits hours of practicum work and 18 credits of supervised experience. These specifications are consistent with the licensure requirements of the West Virginia Board of Examiners of Psychology and will prepare students to take the Examination for Professional Practice of Psychology (EPPP), which is required in West Virginia for graduates to be licensed as Supervised Psychologists. Coursework will be completed within two years and the degree completed in three years.

6.2.e.2. General Education Requirement: N/A

6.2.e.3. Minimum requirement: N/A

6.3. Program Need and Justification

6.3.a. Relationship to Institutional Goals/Objectives:

West Liberty University's mission is to provide our students the opportunity for a high quality undergraduate, graduate, and professional education through appropriate formats and venues. The proposed degree will seek to enhance university strategic growth through the advancement of innovative and transformative learning opportunities for both traditional and non-traditional students, including mental health practitioners who are seeking to complete a graduate degree in a manner conducive to their active schedules.

6.3.b. Existing Programs:

The clinical psychology master's degree would be unique to this region. Currently, there is no public stand-alone Master of Arts in Clinical Psychology program in West Virginia so duplication of degrees offered by other state universities would be avoided. The two programs most closely related to West Liberty University's intended program have immense differences in program focus. West Virginia University offers a Master of Arts in Applied Behavioral Analysis and awards a Master's Degree in Clinical Psychology and Counseling Psychology within the context of obtaining a doctoral degree. Marshall University offers a Master of Arts in Counseling.

6.3.c. Program Planning and Development:

Planning for the Master of Science in Clinical Psychology program began in March 2014. Forty individuals who were either students currently enrolled in the undergraduate psychology program at West Liberty University or were recent alumni were surveyed. Seventy-eight of the students surveyed stated that they would very likely want to enroll in a master's program in psychology at West Liberty University. The survey was repeated in 2015. Of 33 students surveyed, 88% indicated that they would likely enroll in a master's program. In total, seventy-three current students and alumni from the WLU psychology program were surveyed over the last two years regarding their interest in a Master of Arts

in Clinical Psychology. Ninety-two percent of those surveyed indicated that if such a program were offered, they would be likely or very likely to want to enroll.

In addition to psychology majors and other related majors at West Liberty University, there are several nearby universities, including Bethany College, Wheeling Jesuit University, Ohio University Eastern, University of Pittsburgh, California University of Pennsylvania, Washington and Jefferson College, Duquesne University, Waynesburg University, Marietta College, and Franciscan University. Based on the number of graduates in psychology or related majors in the region, a graduate program in Clinical Psychology at West Liberty University would likely attract significant enrollment.

The intent to plan was developed by psychology faculty and approved by the WVHEPC on May 11, 2016. All approvals are included as **Appendix A**.

6.3.d. Clientele and Need:

The Master of Arts in Clinical Psychology will provide a needed educational opportunity for three distinct groups: 1) traditional and non-traditional students seeking to professionally practice as licensed psychologists in the state of West Virginia, 2) those wishing to prepare to enter a doctoral program in psychology or related fields; and 3) mental health practitioners already working in the field who have previously completed their bachelor's degree and are seeking advancement in their respective occupations. The proposed master's degree program enables those qualified individuals to advance their knowledge and skills while providing a much-needed service to the West Virginia northern panhandle as well as the rest of the state and surrounding areas.

One of the most salient reasons for this growing national demand centers upon the increase in people who seek assistance in managing mental health and behavioral disorders, as well as the effects of a population coping with the mental and physical impact of aging. "Psychological services are also needed for veterans suffering from war trauma, for survivors of other trauma, and for individuals with autism".^[1] The proposed program will equip graduates to address societal needs, such as substance abuse, psychological assessment, and psychotherapy.

^[1] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Psychologists, on the Internet at <http://www.bls.gov/ooh/life-physical-and-social-science/psychologists.htm> (visited March 29, 2016).

6.3.e. Employment Opportunities:

At present, The Bureau of Labor Statistics predicts that employment of psychologists will grow 19 percent in the area of counseling psychology from 2014 to 2024. [2] The United States Department of Labor reported that the rate of job growth for clinical, counseling, and school psychologist is projected to grow 20 percent from 2014 to 2024, much faster than the average for all occupations.[3] As graduation rates increase, students will need to further their education to compete in a crowded market of individuals who have successfully completed a bachelor's degree. The proposed program offers this opportunity to those students in the Ohio Valley, West Virginia, and surrounding states.

In addition, West Virginia is one of the few states in the country which continues to provide opportunities for psychology licensure for those who have master's degrees in psychology. West Virginia has only 575[4] active psychology licenses and is experiencing a shortage of providers in rural areas across the state, including several counties in the northern panhandle. Hancock County and Tyler County have no licensed psychologists. Brooke County, Marshall County, and Wetzel County have only one licensed psychologist each. Throughout the state, there are 11 counties with no psychologists[5]. Hence, opportunities for promotion and growth within these fields, particularly in West Virginia, will be more accessible for those seeking employment in the field of psychology.

The majority of West Liberty's student body comes from the northern panhandle of West Virginia, eastern Ohio and western Pennsylvania, and therefore the state

[2] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Psychologists, on the Internet at <http://www.bls.gov/ooh/life-physical-and-social-science/psychologists.htm> (visited March 29, 2016).

[3] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Psychologists, on the Internet at <http://www.bls.gov/ooh/life-physical-and-social-science/psychologists.htm> (visited March 29, 2016).

[4] The West Virginia Board of Examiners of Psychologists, Statistics webpage, updated December 30, 2015. http://www.wvpsychbd.org/statistics_page.htm (visited March 29, 2016).

[5] The West Virginia Board of Examiners of Psychologists, Map of WV Listing Licensed Psychologists, updated December 30, 2015. http://www.wvpsychbd.org/statistics_page.htm (visited March 29, 2016).
<http://www.wvpsychbd.org/Psychologists%20by%20County%20and%20Degree%20Dec%202015.bmp>

and this region need adequate programs to train, educate and prepare students for success in a growing and highly desired field of psychology. Due to the lack of in-state advanced educational opportunities in the geographic area, many local students cannot pursue a master's degree because of the length of travel and financial resources required to reach an on-campus out-of-state program or the expense associated with online programs, none of which are accredited by the American Psychological Association at this time. The proposed degree will fulfill the need for licensed psychologists in West Virginia in addition to providing high quality psychological service to the community.

6.3.f. Program Impact:

This program will be able to share expenses and facilities with the implemented Master of Science in Criminology program.

6.3.g. Cooperative Arrangements:

Letters of support from the community and agency leaders are submitted in **Appendix B**

6.3.h. Alternatives to Program Development:

NA

6.4. Program Implementation and Projected Resource Requirements

6.4.a. Program Administration:

The Master of Arts in Clinical Psychology will be administered by the clinical psychology faculty as part of the Department of Social and Behavioral Sciences within the College of Liberal Arts at West Liberty University. The graduate program will be administered at the Main Campus accessing Main Hall as the primary area of course instruction. The Master of Arts in Clinical Psychology will utilize four full-time psychology faculty and adjuncts as needed, and less than five percent of the administrative assistant's weekly hours for program administration.

6.4.b. Program Projections:

The planned enrollment for the MA in Clinical Psychology is 12 students per cohort, per year. It is expected that students will be able to complete the coursework in 2 years (4 semesters) averaging a course load of 18 hours per year. An additional year of internship will be required in order to complete the

program, in keeping with the state of West Virginia's licensure requirements for psychologists. FTE numbers are calculated on a Fall/Spring basis, which is the standard formula for such a calculation. The standard of nine hours per conventional semester, moreover, is employed as the basis of full-time graduate enrollment. The First Year FTE is calculated as: 12 students x 18 credit hours taken in the year = 216 credit hours; then 216/18 hours as the full-time standard for two semesters (9 hrs. + 9 hrs. = 18 hrs.) = 12 FTE. Following section 6.4.h an explanation of the FTE numbers (with anticipated retention numbers explained for both in and out-of-state students), expenses, and projected revenue for the program are presented.

6.4.c. Faculty Instructional Requirements:

The MA in Clinical Psychology will require four full-time faculty members with 3 courses taught by adjuncts in order to provide the required master's curriculum in addition to the current undergraduate courses. West Liberty University currently has three full-time faculty members in psychology and one administrator who teaches one course per semester. An additional full-time faculty member with a Ph.D. or Psy.D. in Clinical Psychology, a license to practice psychology in the state of West Virginia, and at least two years of clinical experience will be required. This faculty member is expected to begin with a rank of Assistant Professor.

6.4.d. Library Resources and Instructional Materials:

The Paul N. Elbin Library presently has adequate resources for the MA in Clinical Psychology program with database access maintained through Ebsco-Host and Proquest. The addition of PsycINFO as budgeted, will further support students in their successful completion of the program.

6.4.e. Support Service Requirements

Computer facilities in Main Hall will be maintained to allow students access to statistical and testing software necessary for program completion. Standard psychological tests used in the industry will be purchased to train students in the administration and interpretation of these tools. The WLU Learning and Student Development Center will support ADA accommodations.

6.4.f. Facilities Requirements:

No additional space is required.

6.4.g. Operating Resource Requirements:

Appendix C depicts a 5 year projection of enrollment. Tuition increases, faculty raises, and projected educational expenses are further explained below.

6.4.h. Sources of Operating Resources:

West Liberty is not seeking any new financial support for this program. The program will be supported mainly by tuition revenues and General Fund appropriations from the college and department when necessary, such as for unanticipated additional marketing expenses. There are no expectations for supplementary resource needs beyond the usual or expected institutional allocations derived through the regular budget process. Please see the Five Year Projection of Total Operating Resource Requirements in **Appendix D**.

6.5. Program Evaluation

6.5.a. Evaluation Procedures:

The program will adhere to the systematic review process for all university programs every 2.5 years by the Assessment and Accreditation Committee and every 5 years by the Board of Governors Review, providing valuable assessment data for faculty and students, as well as information on program productivity and effectiveness. In addition, students will complete a comprehensive written and clinical defense. The process of program self-evaluation is represented in the table below with the goal of evaluating concrete learning outcomes for student and program success.

Program Objectives	Program Outcomes	Outcome Components	Assessment Measures
<p>Professionalism</p>	<p>Graduates will demonstrate professional values in their application of psychological principles.</p>	<p>Demonstrate behavior and comporment that reflect the values and attitudes of psychology.</p> <p>Demonstrate awareness, sensitivity and skills in working professionally with diverse individuals, groups and communities who represent various cultural and personal background and characteristics defined broadly and consistent with APA policy.</p> <p>Apply ethical concepts and awareness of legal issues regarding professional activities with individuals, groups, and organizations.</p> <p>Utilize personal</p>	<p>Portfolio Review</p> <p>Professionalism Competency Benchmark in Professional Psychology Rating Form completed at the end of each semester by faculty and/or supervisor (see Appendix E)</p>

		and professional reflection, self-care, and self-awareness considering competency and boundaries.	
Relational Skills	Graduates will relate effectively and meaningfully with individuals, groups, and/or communities	Ability to establish, develop, and maintain effective professional relationships with individuals, groups, and/or communities	Portfolio Review Relational Competency Benchmark in Professional Psychology Rating Form completed at the end of each semester by faculty and/or supervisor (see Appendix E)
Science	Graduates will be able to apply scientific methods to clinical practice	Evaluates study methodology and scientific basis of findings and demonstrates knowledge of application of scientific methods to evaluating practices, interventions, and programs.	Portfolio Review Scientific Competency Benchmark in Professional Psychology Rating Form completed at the end of each semester by faculty and/or supervisor (see Appendix E)
Application	Graduates will apply research and clinical	Applies knowledge of evidence-based practice, including	Portfolio Review Clinical

	<p>expertise to client care.</p>	<p>empirical bases of assessment, intervention, and other psychological applications, clinical expertise, and client preferences</p> <p>Utilizes systematic approaches of gathering data to inform clinical decision-making</p> <p>Formulates and conceptualizes cases, plans and implements interventions that are specific to case and context</p>	<p>Competency Competency Benchmark in Professional Psychology Rating Form completed at the end of each semester by faculty and/or supervisor (see Appendix E)</p>
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6.5.b. Accreditation Status:
NA

APPENDIX A

Approvals

Bruce L. Berry, M.D.
Chair



Paul L. Hill, Ph.D.
Chancellor

Leading the Way:

Access. Success. Impact.

West Virginia Higher Education Policy Commission

1018 Kanawha Boulevard, East, Suite 700
Charleston, West Virginia 25301
www.wvhepc.edu
May 11, 2016



Dr. Stephen G. Greiner
President
West Liberty University
208 University Drive
Campus Box 142
West Liberty, WV 26074

Dear President Greiner:

As no concerns regarding the Master of Arts in Clinical Psychology Intent to Plan were received, I approve the request from West Liberty University to initiate the development of the new program. The proposal for implementation should be prepared in accordance with the language and provisions of Series 11, *Submission of Proposals for New Academic Programs and the Discontinuance of Existing Programs*. While the proposal 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 graduate program. In addition, you will need to affirm that the program will be able to secure approval from the Higher Learning Commission.

I understand your desire to implement this program as soon as possible; however, addressing these issues and working closely with Dr. Corley Dennison as you develop the program proposal will facilitate the timely review of your final proposal. If you have questions or need assistance, please contact the Academic Affairs Office.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul L. Hill".

Paul L. Hill
Chancellor

cc: Brian Crawford, Provost, West Liberty University
Corley Dennison, III, Vice Chancellor for Academic Affairs, Commission

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

WEST LIBERTY UNIVERSITY
Petition to the Curriculum Committee
For a NEW PROGRAM, MAJOR, MINOR or TRACK

CC-2
Revised 8-11-15

Name of PROGRAM, MAJOR, MINOR or TRACK
MA in Clinical Psychology

CURRICULUM
COMMITTEE
ACTION:

Anticipated Start Date Fall 2018

If creating new major, under what program does it fall? Psychology

Approved

Rejected

Tabled until _____

Remanded to _____

for additional info.

WHAT IS THE NATURE OF THIS NEW PROGRAM/MAJOR/MINOR/TRACK?
see attached

Date: 10-12-14

WHY IS IT NEEDED?

New Master of Arts program. Students in the proposed degree program will complete 30 credits of master's level psychology coursework with a minimum GPA of 3.0, plus 6 credits hours of practicum work and 18 credits of supervised experience. The practicum and internship requirements are consistent with licensure prerequisites from the West Virginia

*- provisional approval: still
need 563, pre-req.,
and hours in 562 + 563
Completed 12/14/16 BRC*

IS THIS PROGRAM/MAJOR/MINOR/TRACK SIMILAR OR IDENTICAL TO A PROGRAM/MAJOR/MINOR/TRACK BEING OFFERED AT ANOTHER INSTITUTION IN WEST VIRGINIA?

Yes No

If "Yes", list, on an attached sheet, those other institutions that have a similar program.

Also list, on an attached sheet, those other institutions that have been in articulation on this program/major/minor/tract, and any agreements.

WHAT STUDENT POPULATION WILL BE SERVED?

Master's level students

WHAT IS THE PROJECTED INITIAL ENROLLMENT? 12

WHAT IS THE PROJECTED STABLE ENROLLMENT? 32

(over)

LIST ALL INSTITUTIONS INVOLVED IN ANY RELATED ARTICULATION AND DELINEATE THE EXTENT OF AGREEMENTS.


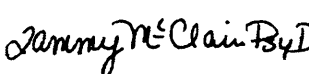
NA

IF ADDITIONS OR CHANGES IN BUDGET, FACILITIES, OR FACULTY WILL BE REQUIRED BY THIS PROGRAM/MAJOR/MINOR/TRACK, SPECIFICALLY SHOW HOW EACH WILL BE ACCOMPLISHED.

In order to meet the requirements of the Board of Examiners of Psychology for graduates to be license-eligibe, we will need the addition off one faculty member to teach in both the undergraduate and graduate psychology programs. A program budget will be required to purchase instructional supplies. No facility changes are required. All costs will be covered by revenue generated from the program.



- ATTACH FORM CC-1 FOR EACH NEW COURSE REQUIRED AND FORM CC-3 FOR EACH COURSE CHANGE REQUIRED.
- New Programs must be reviewed by Faculty Senate.

DEPARTMENT ACTION	COLLEGE ACTION	DIR. OF TEACHER EDUC.
<input checked="" type="checkbox"/> Approved  _____ Chairperson Signature 10/4/2016	<input checked="" type="checkbox"/> Approved  _____ Dean Signature 10/4/2016	<input type="checkbox"/> Approved _____ Director Signature Click here to enter a date.

Program Requirements:

Students in the proposed degree program will complete 30 credits of master's level psychology coursework with a minimum GPA of 3.0, plus 6 credits hours of practicum work and 18 credits of supervised experience. The practicum and internship requirements are consistent with licensure prerequisites from the West Virginia Board of Examiners of Psychology. This program will prepare students to take the Examination for Professional Practice of Psychology (EPPP), which is necessary in West Virginia for graduates to be licensed as Supervised Psychologists.

Curriculum: Coursework will consist of:

- CPSY 520 Lifespan Development (3 credits)
- CPSY 525 Multicultural & Rural Psychology (3 credits)
- CPSY 530 Research Methods (3 credits)
- CPSY 535 Biological Bases of Behavior (3 credits)
- CPSY 540 Clinical Assessment I (3 credits)
- CPSY 541 Psychopathology and Diagnosis (3 credits)
- CPSY 542 Clinical Assessment II (3 credits)
- CPSY 543 Individual Psychotherapy and Tx Planning (3 credits)
- CPSY 550 Substance Abuse Treatment (3 credits)
- CPSY 555 Legal, Ethical, and Prof. Issues in Psychology (3 credits)
- CPSY 560 Clinical Practicum I (3 credits)
- CPSY 561 Clinical Practicum II (3 credits)
- *CPSY 562 Clinical Internship I (9 credits)
- *CPSY 563 Clinical Internship II (9 credits)

*Prior to internship, students will be required to successfully complete an oral clinical defense and a dispositional appraisal.

Course Descriptions and Learning Outcomes:**PSYC 520 – Developmental Psychology
3 Credit Hours**

Description: A comprehensive biopsychosocial overview of the human lifespan from prenatal development until death, including appropriate research methods and designs. Application of theories and recent research outcomes in a therapeutic setting will be emphasized.

Learning Outcomes: As a result of this course, students will

- Apply the major developmental theories that frame psychologists' understanding of the lifespan
- Describe the developmental needs and issues for individuals at different life stages
- Recognize the normative and nonnormative factors that influence individual development over the lifespan, such as culture, family, genetics, education, peers, and environment
- Summarize recent research findings in the field of lifespan development
- Apply appropriate research methods and ethical standards for developmental psychology
- Anticipate precipitating factors in problematic development

PSYC 525--Multicultural and Rural Psychology
3 Credit Hours

Description: An exploration of the ways that culture, race, and community influence individual's behavior and cognitive perspectives. Issues concerning the assessment and treatment of diverse populations will be covered with an emphasis on rural communities.

Learning Outcomes: As a result of this course, students will

- Formulate strategies for working with clients within their cultural framework
- Reflect on the impact culture has on students' own behavior, cognitions and affect
- Evaluate designs' and methodologies suitability for cultural research
- Explain privilege and describe its consequences in society
- Differentiate between urban and rural settings and their corresponding therapeutic approaches and cultural understandings

PSYC 530 - Research Methods
3 Credit Hours

Description: Investigation of common research designs and statistical analysis techniques used in social science research. Topics will include variable identification, sampling techniques, experimental and nonexperimental designs, methods of control, descriptive statistics, statistical inference, hypothesis testing, parametric and nonparametric tests, correlational techniques, and multivariate techniques.

Learning Outcomes: As a result of this course, students will

- Describe advantages and disadvantages of different research designs
- Interpret appropriate statistical techniques for a given example research scenario
- Conduct basic descriptive and inferential statistical analysis

PSYC 535 - Biological Basis of Behavior
3 Credit Hours

Description: Biological and neural basis of behavior, psychopharmacology, and methodologies supporting this body of knowledge. Emphasis is on the physical, anatomical, and chemical aspects of the nervous system and their relation to a variety of functions (i.e. learning, memory, and psychological disorders).

Learning Outcomes: As a result of this course, students will

- Explain the organization and functions of the nervous system with emphasis on the central nervous system
- Select appropriate drugs used in psychopharmacology for specific psychological diagnosis
- Differentiate neurological, physiological, and endocrine disorders

PSYC 540 – Clinical Assessment I
3 Credit Hours

Description: Clinical interviewing, psychometrics, assessment models, principles, and approaches with both children and adults. Administration, scoring, and interpretation of intellectual and achievement tests. Introduction to integrated report writing.

Learning Outcomes: As a result of this course, students will

- Describe assessment theories, models, and methods
- Administer, score and interpret intellectual and achievement tests
- Write integrated psychological reports
- Apply criteria for selection and adaptation of assessment methods

PSYC 541 Psychopathology and Diagnosis
3 Credit Hours

Description: Clinical case conceptualization, including integrating assessment, diagnosis, epidemiology of clinical disorders, and an introduction to treatment planning, based on current theory and research.

Learning Outcomes: As a result of this course, students will

- Differentiate psychological disorders in terms of their symptom criteria, base rates, cultural differences, and epidemiology.
- Develop well supported diagnoses, demonstrating understanding of factors influencing the interpretation of data and decision-making
- Develop basic clinical treatment plans.

PSYC 542 – Clinical Assessment II
3 Credit Hours

Description: Continued study of clinical interviewing, psychometrics, assessment models, principles and approaches with both children and adults. Administration, scoring, interpretation of personality and disorder-based assessments as well as integrative report writing will be covered.

Learning Outcomes: As a result of this course, students will

- Administer, score and interpret personality and disorder-based assessments
- Write integrated psychological reports

- Apply criteria for selection and adaptation of assessment methods

**PSYC 543 Individual Psychotherapy and Treatment Planning
3 Credit Hours**

Description: Clinical case conceptualization, including integrating assessment, diagnosis, epidemiology of clinical disorders, and an introduction to treatment planning, based on current theory and research.

- Learning Outcomes:** As a result of this course, students will
- Distinguish between psychological disorders in terms of their symptom criteria, base rates, cultural differences, and epidemiology.
 - Develop well supported diagnoses, demonstrating understanding of factors influencing the interpretation of data and decision-making
 - Write comprehensive clinical treatment plans.

**PSYC 550 Substance Abuse Treatment
3 Credit Hours**

Description: Epidemiological models of substance abuse and the current best practices for treatment. Cognitive behavioral therapy, motivational interviewing approaches, and systems theory will be highlighted.

- Learning Outcomes:** As a result of this course, students will
- Apply relevant theoretical approaches to the etiology of substance abuse
 - Create treatment plans based on current best practices
 - Demonstrate appropriate therapeutic techniques
 - Evaluate the ongoing progress and attainment of therapeutic outcomes

**PSYC 555: Legal, Ethical, and Professional Issues in Psychology
3 Credit Hours**

Description: American Psychological Association's (APA) Ethical Principles of Psychologists and Code of Conduct and the legal requirements of the field. Additionally covers ethical decision making and preparation for professional licensure.

Learning Outcomes: As a result of this course, students will

- Delineate between ethical concerns and legal issues
- Evaluate the impact of state and federal laws on practice of clinical psychology
- Demonstrate the application of ethical principles and conduct to therapeutic and research settings
- Defend and justify ethical decisions using a comprehensive decision making model
- Summarize the necessary steps for psychology licensure

PSYC 560 Clinical Practicum I
3 Credit Hours

Description: This 240-hour practicum is the first course in a two-course sequence which introduces students to clinical training and supervised experience in the application of principles of therapy and assessment in a clinical setting. Diagnostic and therapeutic skills are practiced, and basic documentation skills are employed.

Learning Outcomes: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes

PSYC 561 Clinical Practicum II
3 credit hours

Description: This 240-hour practicum the second course in a two-course sequence which introduces clinical training and supervised experience in the application of principles of therapy and assessment in a clinical setting. Diagnostic and therapeutic skills are practiced, and basic documentation skills are learned.

Learning Outcomes: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes

**CPSY 562 Clinical Internship I:
9 credit hours**

Description: This 1000-hour internship provides advanced opportunities for students to perform, under supervision, in a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience includes a minimum of 500 hours of direct client contact hours. Weekly supervision meetings are required.

Learning Outcomes: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes
- Conduct risk assessments, implement risk management plans, and make client triage decisions.

CPSY 563 Clinical Internship II
9 credit hours

Description: This 1000-hour internship provides advanced opportunities for students to perform, under supervision, in a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience includes a minimum of 500 hours of direct client contact hours. Weekly supervision meetings are required.

Learning Outcomes: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outcomes
- Conduct risk assessments, implement risk management plans, and make client triage decisions.

WEST LIBERTY UNIVERSITY

Petition to the Curriculum Committee for a NEW COURSE

CC-1
Revised 8-10-15

Discipline & Course Number PSYC 562 Course Title Clinical Internship I

Grade Options: Check all that apply: Standard Letter; Pass/Fail; Repeated Course; Ungraded

Credit Hours 6 Contact Hours 6

Nature of Course: Lecture; Laboratory/Studio; Field Experience/Internships

EFFECTIVE: Fall 2018 (enter year)

Course Objectives: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outco (May attach syllabus)

CATALOG DESCRIPTION: This internship provides advanced opportunities for students to perform, under supervision, a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience is the first in a series which allows students to make progress toward the 2000 hours required by WV Board of Examiners of Psychology. Weekly supervision meetings are required.

NOTE: This course will begin on the first day of Summer I and end the last Friday before the start of the Fall semester. The instructor on record will be the Program Coordinator for the MA Clinical Psychology program. This course will not be included in the calculation of teaching load.

Registration Restrictions: MA Clinical Psychology students

Pre-requisites:

WHY IS THIS COURSE NEEDED? This coure fulfills one requirement for licensure in WV as a Supervised Psychologist

Frequency of offering annually

Projected Enrollment: 12

Elective, OR Required in MA Clinical Psychology Major(s). (Must complete CC-4 to reflect changes to majors.)

CURRICULUM
COMMITTEE
ACTION:

Approved

Rejected

Tabled until _____

Remanded to _____

_____ for additional info.

Date: 12-19-10

If changes in budget, facilities, and/or faculty will be required, explain, in detail, on an attached sheet, how this will be accomplished.

Is this new course, or one similar to it, being offered by another department/college at the present time? Yes; No

If yes; list those other departments/colleges that offer this course.

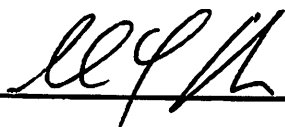
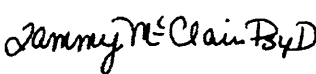
Does this new course take the place of another course? If so, which course? (Be sure to delete old course on CC-3)

If this new course is the result of a "course number change", is it included in articulation or any other agreement with another institution at the present time? Yes No

If yes, list on an attached sheet, those institutions in articulation, and the type of agreement.

Submitted by Jammy McClain PsyD

Date 10/4/2016

DEPARTMENT ACTION	COLLEGE ACTION	DIR. OF TEACHER EDUC.
<input type="checkbox"/> Approved  _____ Chairperson Signature 10/4/2016	<input type="checkbox"/> Approved  _____ Dean Signature 10/4/2016	<input type="checkbox"/> Approved _____ Director Signature Click here to enter a date.

WEST LIBERTY UNIVERSITY
Petition to the Curriculum Committee for a **NEW COURSE**

Discipline & Course Number PSYC 563

Course Title Clinical Internship II

Grade Options: Check all that apply: Standard Letter; Pass/Fail; Repeated Course; Ungraded

Credit Hours 6

Contact Hours 6

Nature of Course: Lecture; Laboratory/Studio; Field Experience/Internships

EFFECTIVE: Fall 2018 (enter year)

Course Objectives: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outco (May attach syllabus)

CATALOG DESCRIPTION: This internship provides advanced opportunities for students to perform, under supervision, a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience is the second in a series which allows students to make progress toward the 2000 hours required by WV Board of Examiners of Psychology. Weekly supervision meetings are required.

NOTE: This course will begin on the first day of Fall and end the last Friday before the start of the Spring semester. The instructor on record will be the Program Coordinator for the MA Clinical Psychology program. This course will not be included in the calculation of teaching load.

Registration Restrictions: MA Clinical Psychology students

Pre-requisites: _____

WHY IS THIS COURSE NEEDED? This coure fulfills one requirement for licensure in WV as a Supervised Psychologist

Frequency of offering annually

Projected Enrollment: 12

Elective, OR Required in MA Clinical Psychology Major(s). (Must complete CC-4 to reflect changes to majors.)

If changes in budget, facilities, and/or faculty will be required, explain, in detail, on an attached sheet, how this will be accomplished.

Is this new course, or one similar to it, being offered by another department/college at the present time? Yes; No

If yes; list those other departments/colleges that offer this course. _____

Does this new course take the place of another course? If so, which course? _____ (Be sure to delete old course on CC-3)

If this new course is the result of a "course number change", is it included in articulation or any other agreement with another institution at the present time? Yes No

If yes, list on an attached sheet, those institutions in articulation, and the type of agreement.

CC-1

Revised 8-10-15

**CURRICULUM
COMMITTEE
ACTION:**

Approved

Rejected

Tabled until _____

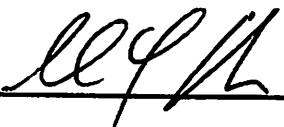
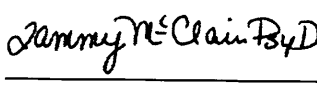
Remanded to _____

_____ for
additional info.

Date: 12-14-16

Submitted by Jimmy McClain ByD

Date 10/4/2016

DEPARTMENT ACTION	COLLEGE ACTION	DIR. OF TEACHER EDUC.
<input type="checkbox"/> Approved  _____ Chairperson Signature 10/4/2016	<input type="checkbox"/> Approved  _____ Dean Signature 10/4/2016	<input type="checkbox"/> Approved _____ Director Signature Click here to enter a date.

WEST LIBERTY UNIVERSITY
Petition to the Curriculum Committee for a **NEW COURSE**

Discipline & Course Number PSYC 564 Course Title Clinical Internship III

Grade Options: Check all that apply: Standard Letter; Pass/Fail; Repeated Course; Ungraded

Credit Hours 6 Contact Hours 6

Nature of Course: Lecture; Laboratory/Studio; Field Experience/Internships

EFFECTIVE: Fall 2018 (enter year)

Course Objectives: As a result of this course, students will

- Demonstrate knowledge, awareness, and behaviors consistent with APA's ethical principles and agency policies of professional conduct
- Display awareness of strengths, limitations, and area of growth as developing psychologists
- Complete assessments that answer assessment questions within the context of presenting complaints, history, and larger social, cultural, and environmental factors.
- Effectively deliver counseling services within multiple treatment models to clients with a variety of presenting concerns and backgrounds
- Write coherent case conceptualization reports and collaborative treatment plans incorporating evidence-based practices
- Evaluate and monitor treatment progress and outco (May attach syllabus)

CATALOG DESCRIPTION: This internship provides advanced opportunities for students to perform, under supervision, a variety of clinically-related activities that a licensed professional with a master's degree in clinical psychology would be expected to perform. The clinical experience is the third in a series which allows students to complete the 2000 hours of internship required by WV Board of Examiners of Psychology. Weekly supervision meetings are required.

NOTE: This course will begin on the first day of Spring and end the last Friday before the start of the Summer I semester. The instructor on record will be the Program Coordinator for the MA Clinical Psychology program. This course will not be included in the calculation of teaching load.

Registration Restrictions: MA Clinical Psychology students

Pre-requisites:

WHY IS THIS COURSE NEEDED? This coure fulfills one requirement for licensure in WV as a Supervised Psychologist

Frequency of offering annually

Projected Enrollment: 12

Elective, OR Required in MA Clinical Psychology Major(s). (Must complete CC-4 to reflect changes to majors.)

If changes in budget, facilities, and/or faculty will be required, explain, in detail, on an attached sheet, how this will be accomplished.

Is this new course, or one similar to it, being offered by another department/college at the present time? Yes; No

If yes; list those other departments/colleges that offer this course.

Does this new course take the place of another course? If so, which course? (Be sure to delete old course on CC-3)

If this new course is the result of a "course number change", is it included in articulation or any other agreement with another institution at the present time? Yes No

If yes, list on an attached sheet, those institutions in articulation, and the type of agreement.

CC-1
Revised 8-10-15

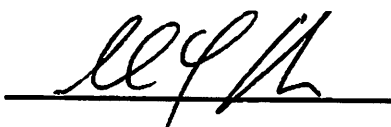
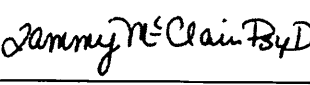
**CURRICULUM
COMMITTEE
ACTION:**

- Approved
- Rejected
- Tabled until _____
- Remanded to _____ for additional info.

Date: 12-14-10

Submitted by Jimmy McClain ByD

Date 10/4/2016

DEPARTMENT ACTION	COLLEGE ACTION	DIR. OF TEACHER EDUC.
<input type="checkbox"/> Approved  _____ Chairperson Signature 10/4/2016	<input type="checkbox"/> Approved  _____ Dean Signature 10/4/2016	<input type="checkbox"/> Approved _____ Director Signature Click here to enter a date.

Senators present: Michael Aulick, Linda Cowan, Brian Fencl, Jeff Pfister (*secretary*) Gregory Chase, James Crumbacher, Dave Hanna, Hannah Harnar, Aaron Huffman, Ryan Koenig, Sheli Bernstein-Goff, Darrin Cox, Aaron Harper, Corey Reigel (*vice-chair*), Peter Staffel, Theunis van Aardt, Fuhua Chen, Chad Kuhns, Jon Serra (*chair*), Matthew Zdilla

Parliamentarian: Robert Gall

Absent members: Margy Bowman

Administrators, Representatives, and Honored Guests: Stephen Greiner (*President*) Brian Crawford, (*Provost*), Sylvia Hawranick-Senften (*ACF Representative*), James Haizlett, (*BOG Representative*),

Senate was called to order by the Senate Chair, Jon Serra at 3:30 p.m. in Campbell Hall, room 304.

President Greiner:

- Room Capacity - Anthony (Sal) Salatino has been in contact with the Fire Marshal to set room capacity signs on classrooms per request of last senate meeting.
- Facilities Master Plan – Appreciation was expressed for those who responded to the call of providing input to the plan. The first project addressed will be the technology infrastructure on campus. A recent study performed by an outside source reports 28 concerns related to the campus-wide technology. Identified problems extend beyond Wi-Fi. Remaining bond funds from the Campbell Hall project will be used. Upgrades could cost as much 1 million. Bids for project will be collected, start date will not likely begin until spring.
- Employee Raise – Dependent on changes to the budget, a plan to provide raises will be presented to the Board for a minimum raise for all employees.
Questions from the floor – 1) security issues related to current technology, 2) RFP for the technology upgrade, 3) academic reorganization plan, 4) sports play-by-play announcer position. Discussions followed.

Provost Crawford:

- M.A., M.S. Biology at review stage with HLC
- M.S. Dental Hygiene approved by board, headed to HEPC
- All classes/labs/offices will be moved out of the basement of Main Hall due to recent water damage.
Questions from the floor – 1) Graduate Studies Council, 2) staff member approved for teaching roles, 3) hiring priority. Discussions followed.

Sylvia Hawranick-Senften – ACF Representative:

- PEIA proposed increases beginning July. A personal example provided insight how her premium could rise by about 8%. Open meetings will be held in November for anyone with questions.

Jim Haizlett – BOG Representative:

- Last BOG meeting
 - Policy 56
 - Realignment – tabled for next meeting
- Next BOG meeting in November 30th
- *Questions from the floor* – 1) whether or not the letters received addressing Policy 56 represented an accurate voice of the campus community, 2) procedures regarding realignment, 3) effect of tabled realignment. Discussions followed.

Aaron Harper – General Studies Philosophy:

- Proposed moving courses to better reflect course outcomes; leave “Logic” course in the *Logic/Critical* category, move other courses (Intro to Philosophy, ethics, special topics, history, etc.) into the *Perspectives and Culture* category.
Questions from the floor – no questions
Vote - Motion to accept changes as written, Reigel. Seconded, Cowan. No discussion. Motion passes (yea 19, no-0, abstain-1).

Aaron Harper – General Studies Religion/Foreign Language:

- Proposed to separate Religion/Foreign Language to become independent groups
Questions from the floor – 1) benefit, 2) General Studies groupings within other degrees. Discussion occurred.
- *Vote* – Motion made to accept changes as written, Cowan. Seconded by Reigel. No discussion. Motion passes (18-yea, 0-no, 2-abstained).

Tammy McClain – M.A. Clinical Psychology:

- Proposed 54-credit master’s degree. Graduates will be eligible for licensure work in West Virginia.
Questions from the floor – 1) comparison of other similar programs, 2) projected students, 3) Sylvia Senften noted for the record her concern about only hiring only 1-full-time faculty member, 4) M.A. vs. M.S., 5) Internship opportunities, 6) Start date. Discussion occurred.
- *Vote* – Motion made to accept degree program as written, Reigel. Seconded by Staffel. No discussion. Faculty voted, motion passes (14-yea, 2-no, 3-abstained).

Darrin Cox – Finance Report:

- A motion was made to accept Policy 245 proposal, Cowan. Seconded by Reigel.
 - Aaron Harper expressed that the ombudsman doesn’t have any special training/knowledge for this situation. Darrin Cox made a motion to amend policy as written to strike “faculty ombudsman” from policy. Seconded by Reigel. Faculty voted, motion passes - unanimously.
 - Darrin Cox made a motion to amend policy as written to strike language from section I. *FULL-TIME FACULTY SALARY EQUITY* of the proposal “in order to identify potentially underpaid employees for the purpose of increasing faculty retention.” Seconded by Reigel. Faculty voted, motion passes – unanimously.
- Faculty voted on motion as amended. Motion passes (16-yea, 0-no, 0-abstained).

- Committee concluded study of workload at other institutions. Information will be presented to Policies and Procedures Committee.
- Darrin Cox requested that Provost Crawford clarify the use of FTE.
- *Questions from the floor* – no questions.

Linda Cowan – Personnel Policies & Procedures Report:

- Letter of Appointment – committee developed a policy and sample letter
 - A motion to accept the new policy of appointment was made by Cowan. Seconded by Reigel. Discussion occurred.
 - A motion was made by Darrin Cox to strike the last sentence above the signature line from the sample letter, “*This Initial Letter of Appointment has been discussed with me.*” Seconded by Reigel. Faculty voted, motion passes (1-abstained).
 - A motion was made to add a watermark “*sample*” on the sample letter was made by Sheli Bernstein-Goff. Seconded by Reigel. Faculty voted, motion passes unanimously.
 - Discussions continued.
 - *Vote* – Faculty voted on motion with amendments. Motion passes (17-yea, 0-no, 1-abstained).

Aaron Harper – Academic Policies Report:

- No recent meeting
- Next meeting will discuss – Grade Appeal Policy
- *Questions from the floor* – no questions.

Announcements:

- Classroom Space Utilization & Facilities Allocation has a new Chair
 - Matt Inkster, Chair
 - Interested faculty should contact Matt Inkster

Faculty Forum:

- Various topics were identified and discussed.

A motion to adjourn was made and seconded. The Senate adjourned at 5:19 pm.

Respectfully Submitted,

Jeff Pfister, Senate Secretary



WEST LIBERTY UNIVERSITY

Board of Governors Chair
208 University Drive
West Liberty, WV 26074

Leslie DeFelice
(304) 281-2409
lesd@visitingangelswv.com

FROM: West Liberty University Board of Governors

DATE: December 13, 2016

RE: Approval to Add Master of Arts in Clinical Psychology

At its meeting held November 30, 2016, the West Liberty University Board of Governors unanimously approved the proposal to add the new degree program Master of Arts in Clinical Psychology to be offered within the College of Liberal Arts, Department of Social and Behavioral Sciences.

Leslie DeFelice, Chair
West Liberty University Board of Governors

APPENDIX B
Letters of Support

State of West Virginia
Board of Examiners of Psychologists
P.O. Box 3955
Charleston, WV 25339-3955



Phone: 304-558-3040
Fax: 304-558-0608
Email: psychbd@wv.gov
Web: www.wvpsychbd.org

November 10, 2016

Tammy McClain, Psy.D.
West Liberty University
208 University Drive, #149
West Liberty, WV 26074

RE: Request for Endorsement

Dear Dr. McClain:

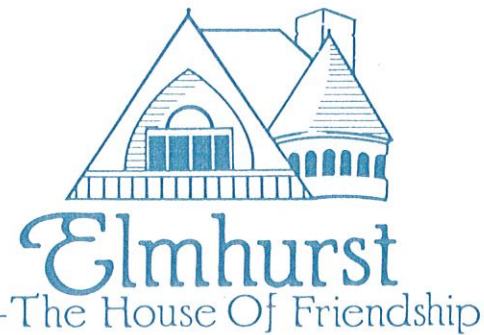
Assuming that the Masters of Arts degree in clinical psychology is implemented as described in the Summary of New Program Proposal Master of Arts in Clinical Psychology", the Board will accept the degree as meeting the requirements for Master's degree level education.

Sincerely Yours,

Jeffrey Harlow Ph.D.

Jeffrey Harlow, Ph.D.
Executive Director

(KL)



Jamie R. Crow
Executive Director
Elmhurst, The House of Friendship
1228 National Road
Wheeling, WV 26003

August 30, 2016

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with the endeavor. We wish you the best of luck.

Sincerely,

Jamie R. Crow, MSW
Executive Director



TRINITY
MEDICAL CENTER EAST

380 Summit Avenue
Steubenville, OH 43952
740-283-7000

August 31, 2016

Dr. Tammy McClain
208 University Drive #149
West Liberty, WV 26074

Dear Dr. McClain:

I am excited to hear of the proposed program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychology services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,

Don Ogden, MS, MBA, LSW, LICDC
Director, Behavioral Medicine



Harmony House, Inc.
Leslie Vassilaros
2000 Eoff Street
Wheeling, WV 26003

September 6, 2016

Dear Dr. McClain:

Harmony House is very excited to hear that West Liberty University is proposing a graduate program, Master's Degree in Clinical Psychology. This is a much needed higher education degree in our area and should be very marketable. This will meet a need for psychological services vital to the well-being of our state and region.

West Liberty University will be able to masterfully develop and manage such a program. This is a very logical progression for the University.

Harmony House supports WLU in this new endeavor.

Sincerely,

A handwritten signature in blue ink that reads "Leslie Vassilaros".

Leslie Vassilaros

Executive Director, Harmony House, Inc.

Leslie Vassilaros

Executive Director

Nathaniel T. Goudy

Board of Directors, President

Harmony House, Wheeling
2000 Eoff Street
Wheeling, WV 26003

Harmony House, Belmont Co.
66850 Pogue Rd
St. Clairsville, OH 43950

Wheeling Center: 304.234.2205 Fax: 304.234.8479

Belmont County Center: 740.695.0812 Fax: 740.695.0781

Cell: 724.986.0161

Email: harmonyhousecac@yahoo.com Website: harmonyhousecacwv.org





Rick Jones
Principal

JOHN MARSHALL HIGH SCHOOL

1300 Wheeling Avenue, Glen Dale, WV 26038 ~ Phone: 304.843.4444 ~ FAX 304.843.4419

Assistant Principals
Jason Marling
Ashlea Minch
Geno Polsinelli

August 29, 2016

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,

Marilyn M. Wehrheim, LPC, WVBECCNC
School Counselor
John Marshall High School
1300 Wheeling Ave.
Glen Dale WV 26038
Phone 304.843.4444 x145
FAX 304.843.2188
<http://marshall-k12.wvnet.edu/jmhs/>

Youth Services System, Inc.

Human Resources Office

PO Box 6041, 87 15th Street, Wheeling WV 26003
304-233-9627 ext.108 www.youthservicesystem.org cknight@ysswv.com

September 1, 2016

Dr. Tammy McClain
Interim Dean, College of Liberal Arts
West Liberty University
208 University Drive
College Union Box 134
West Liberty WV 26074

Dear Dr. McClain

I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

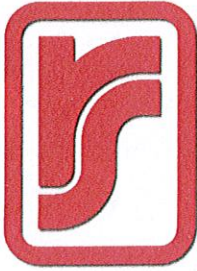
I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,



Charles Knight, MSW



**WEST VIRGINIA DEPARTMENT OF EDUCATION AND THE ARTS
DIVISION OF REHABILITATION SERVICES**

Weirton Branch Office • 100 Municipal Plaza, Suite 200 • Weirton, West Virginia 26062-4573
Telephone: (304) 723-5311 • Fax (304) 723-5318 • www.wvdrs.org

Donna L. Ashworth, Director

Debra Williams
100 Municipal Plaza, Ste. 200
Weirton, WV 26062

Tammy McClain, PsyD
Interim Dean
West Liberty University
208 University Drive
College Union Box 134
West Liberty, WV 26074

September 6, 2016

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. As a professional who seeks these services for West Virginians, I am aware of the need for this program in our area and in West Virginia. I agree that offering a Master's Degree in Clinical Psychology is needed in the higher education system in this area. This program will meet a need for psychological services that are lacking and vitally needed for the well-being of our region and our State.

As an alumnus of West Liberty, with a Bachelor's of Psychology, I am confident that West Liberty University is an institution that can create skilled and empathetic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and State.

You have my full support and endorsement as you move forward with this endeavor. I wish you the best of luck.

Sincerely,

Debra Williams LGSW, MPA
WVDRS Weirton Branch Office Manager



The Children's Home of Wheeling, Inc.

Providing residential care since 1870

1 Orchard Road, Wheeling, WV 26003
(304) 233-2367 Fax: (304)233-3246

Ms. Louise Parea
The Children's Home of Wheeling, Inc.
1 Orchard Road
Wheeling, WV 26003

August 30, 2016

Tammy McClain, Psy.D.
West Liberty University
College of Liberal Arts
208 University Drive
College Union Box 134
West Liberty, WV 26003

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,

Louise Parea
Executive Director
The Children's Home of Wheeling, Inc.

Crittenton Services, Inc.



Believe
Achieve
Empower

August 30, 2016

Tammy McClain, Psy.D.
Clinical Psychologist
Interim Dean, College of Liberal Arts
West Liberty University
College Union Box 134
West Liberty, WV 26074

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,

Kathy F. Szafran, MA, LPC
President and CEO

Crittenton
Programs

Wellspring
Family
Services

Cradles to
Crayons



Lisa Witzberger
West Liberty University Counseling Office
208 University Drive, CUB 117
West Liberty, WV 26074

September 6, 2016

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the most logical step for a university that prides itself in meeting the professional needs of surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. I wish you the best of luck.

Sincerely,


Lisa Witzberger, MSW, LGSW

Second Judicial Circuit

FROM THE CHAMBERS OF
DAVID W. HUMMEL, JR.
Judge



MARSHALL COUNTY COURTHOUSE
SEVENTH STREET
MOUNDSVILLE, WEST VIRGINIA 26041
TELEPHONE (304) 845-3505
FAX (304) 845-2522
E-MAIL davidhummel@courtswv.gov

West Virginia

Marshall, Putnam, Tyler Counties

October 31, 2016

Tammy McClain, Pys.D.
West Liberty University
College of Liberal Arts
208 University Drive
College Union Box 134
West Liberty, WV 26074

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a University that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,

A handwritten signature in blue ink, appearing to read "D.W. Hummel, Jr.", written over a faint printed name.

David W. Hummel, Jr., Chief Judge
Second Judicial Circuit



September 9, 2016

Dear Dr. McClain:

I am excited to hear of the proposed graduate program at West Liberty University. I believe that offering a Master's Degree in Clinical Psychology is a much needed addition to the higher education system in this area. This program will meet a need for psychological services that is vital to the well-being of our region and our state. We refer our patients to psychology and behavioral medicine on a regular basis. This service is needed.

I am confident that West Liberty University is an institution that can create skilled and empathic professionals. A Master's Degree program in Clinical Psychology is the next logical step for a university that prides itself in meeting the professional needs of the surrounding communities and state.

You have my full support and endorsement as you move forward with this endeavor. We wish you the best of luck.

Sincerely,

Amanda K. Wade, PA-C, IBCLC

CENTER FOR PEDIATRICS
Pediatric and Adolescent Medicine

David Mosman, M.D. Geoffrey Ruben, M.D. Matthew Morris, M.D.

APPENDIX C

5-Year Projection of Program Size

APPENDIX C

FORM 1
Page 1 of 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:	12	22	22	22	22
FTE:	12	22	22	22	22
Number of student credit hours generated by courses within the program (entire academic year):	216	396	396	396	396
Number of Majors:					
Headcount:	12	22	22	22	22
FTE:	12	22	22	22	22
Number of student credit hours generated by courses within the program (entire academic year):	216	396	396	396	396
Number of degrees to be granted (annual total):	0	0	10	10	10

* These numbers are based on 83% retention rate.

APPENDIX D

5-Year Projection of Total Operating Resources

APPENDIX D

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	0.1	0.1	0.1	0.1	0.1
2. Full-time Faculty	1	1	1	1	1
3. Adjunct Faculty	0	0.3	0.3	0.3	0.3
4. Graduate Assistants	1	2	2	2	2
5. Other Personnel:					
a. Clerical Workers	0	0	0	0	0
b. Professionals	0	0	0	0	0
 Note: Include percentage of time of current personnel					
B. OPERATING COSTS (Appropriated Funds Only)					
1. Personal Services:		3%	3%	3%	3%
a. Administrators	5000	5200	5300	5500	5700
b. Full-time Faculty	68872.5	71588.10	73728.1	75945.54	78288.68
c. Adjunct Faculty	0	8400	8652	8911.56	9178.91
d. Graduate Assistants	0	0	0	0	0
e. Non-Academic Personnel:					
1. Clerical Workers	0	0	0	0	0
2. Professionals	0	0	0	0	0
Total Salaries	73872.5	85188.10	87680.10	9035.10	93107.59
2. Current Expenses					
1. Marketing	2500	2500	2500	2500	2500
2. Instructional Supplies	3000	3000	3000	3000	3000
3. Office Supplies	500	500	500	500	500
4. Clinical Travel	2500	2500	2500	2500	2500
3. Repairs and Alterations	0	0	0	0	0
4. Equipment:					
1. Educational Equipment	8000	8000	8000	8000	8000
2. Library Books	0	0	0	0	0

3. Library Database	12000	12000	12000	12000	12000
5. Nonrecurring Expense	0	0	0	0	0
Total Costs	28500	28500	28500	28500	28500

C. SOURCES

1. General Fund Appropriations	0	0	0	0	0
2. Federal Government	0	0	0	0	0
3. Private and Other	106029	199351.35	289492.83	297924.66	297924.66
4. Total All Sources	106029	199351.35	289492.83	297924.66	297924.66

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

The FTE for Adjuncts on Page 1, Form 2 is based on a calculation with 3 graduate teaching hours per Fall and Spring terms as full-time teaching. In year 2, for instance, student will complete 6 hrs. over Fall/Spring terms which yields 3 hrs. each term (equivalent 0.3 for the Fall/Spring).

For the purpose of these operating costs projections, all salary percentages include benefits.

Social Security and Medicare costs are included for Adjuncts.

Appropriate raises are also included for all categories of "Personal Services".

The administrative position listed is for the program director with appropriate raises included.

Educational expenses are included at \$8,000 a year for the purchase of psychological testing equipment. The amounts for tuition on Page 2, Form 2 are calculated on the basis of the Headcount numbers

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Approval of the Master of Science in Dental Hygiene

INSTITUTION: West Liberty University

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the Master of Science in Dental Hygiene program at West Liberty University, effective fall 2017. This approval expires two years from the date of Commission approval if the program is not fully implemented at that time.

STAFF MEMBER: Corley Dennison

BACKGROUND:

The West Liberty University online Master of Science Dental Hygiene (MSDH) program will admit students on a competitive basis and preference will be given to applicants with prior clinical experience. Admission requirements include: an Associate of Science in Dental Hygiene and a Bachelor of Science in Dental Hygiene or related field, a minimum GPA of 3.0 cumulatively and in science courses, one employer letter of recommendation, and scores from the Graduate Record Exam.

Students admitted to the program will complete 30 credit hours online including 45 hours of approved field experience in either public health or dental hygiene education. The two-year program will culminate in a capstone experience and run two fall and two spring terms with one summer term following the first spring semester.

The five-year projections have the program recruiting five students in the first fall semester. The program will admit students once per year during the fall term. Evaluation of an increase in enrollment will be investigated after the graduation of two classes. The financial costs for implementing the program include a stipend for a current faculty member to serve as Program Director and salaries for adjunct faculty.

The following is recommended:

- The Master of Science in Dental Hygiene be approved for implementation in fall of 2017.
- If the program is not fully implemented by February 2019, the program will no

longer be considered approved by the Commission and must be resubmitted for review and approval.

- In the 2020-2021 academic year, the Commission will conduct a post-audit review of the program to assess progress toward successful implementation.

West Liberty University
October 20, 2016 (Revised December 14, 2016)
Submission of New Program
Master of Science in Dental Hygiene
West Liberty University, West Liberty, WV 26074



West Liberty University seeks approval for the Master of Science Degree in Dental Hygiene (MSDH). The MSDH enables Bachelor's degree prepared dental hygienists to advance their knowledge to address the complex oral health needs of a diverse population. Courses of study will include public health and education, and will incorporate an active research component leading to a culminating thesis. It is the intent that the proposed program would be web based with limited campus visits to enable licensed professionals from all geographic locations to pursue the Master of Science Degree in Dental Hygiene.

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6.2 Program Description

Healthy People 2020 is an initiative published by the Department of Health and Human Services that outlines objectives to address current threats to health and goals to reduce such threats. The following three objectives support the improvement of oral health:

- Increase awareness of the importance of oral health to overall health and well-being.
- Increase acceptance and adoption of effective preventive interventions.
- Reduce disparities in access to effective preventive and dental treatment services.

The Master of Science Degree in Dental Hygiene is designed to prepare graduates for leadership roles in Dental Education and Public Health to meet their career goals. This online program will consist of 30 hours of coursework in public health and dental hygiene education, over the course of two academic years with one summer semester between. An internship and approved thesis will be the capstone of the program.

6.2.a. Program Objectives: Master of Science Degree in Dental Hygiene

Mission: To provide the Dental Hygiene Bachelor of Science degree student the opportunity for a high quality graduate education in the field of dental hygiene.

Program Goals:

1. To prepare graduates with leadership skills and education pedagogy to assume faculty positions in all levels of dental hygiene education.
2. Through research and scholarly activity, graduates will contribute to the body of knowledge in the field of dental hygiene through presentation and publication.
3. To provide the educational foundation and skill sets necessary for leadership opportunities in the dental public health environment.

Student Learning Outcomes

Upon completion of the MSDH program, the graduate will be able to:

1. Discuss and demonstrate current technologies available in the field of dental hygiene.
2. Describe current research strategies and evaluate scientific evidence that directs the standard of health care.
3. Evaluate risk and develop strategies to address the specific oral health needs of individuals and populations of diversity.
4. Demonstrate an understanding of epidemiology through the assessment and communication of current data representing the health of individuals and/or populations.
5. Create a thesis demonstrating research skills while contributing to the body of knowledge within the discipline of dentistry and/or public health.
6. Demonstrate theories to develop strategies for health promotion and disease prevention.
7. Discuss and demonstrate organizational leadership skills and inter-professional collaborative efforts available to address current healthcare issues.
8. Develop an individual teaching philosophy and investigate effective teaching methods for all learning.

6.2.b. Program Identification

CIP 51.0504

Dental Public Health and Education. A program that focuses on the scientific study of **dental** disease prevention and control, community **dental** health promotion, and prepares dentists and public health professionals to function as **dental** health specialists. Includes instruction in preventive dentistry, the relationship of oral disease to health and quality of life, patient and practitioner behavior, **dental** epidemiology, nutrition and **dental** health, **dental** care policy and delivery, oral health program planning and administration, biostatistics, and research methods.

6.2.c. Program Features:

The Master of Science in Dental Hygiene enables Bachelor's degree prepared dental hygienists to advance their knowledge to address the complex oral health needs of a diverse population. Areas of study will include public health and dental hygiene education, and will include a research component. It is the intent that the proposed program would be web based with limited campus visits to enable licensed professionals from all geographic locations to pursue the Master of Science in Dental Hygiene. All current teaching faculty possess the Master of Science in Dental Hygiene and will contribute valuable clinical and educational experience to the students at the graduate level. Currently, the health science programs at West Liberty University are strong and a variety of professors from various clinical professions can support the education of graduate students. Additionally, students from the local area will benefit from the current operating dental hygiene clinic through teaching assistant opportunities. Graduates of this program will be prepared for employment opportunities in academia, dental public health and research.

6.2.c.1. Admission and Performance Standards:

Catalog Description:

The Sarah Whitaker Glass School of Dental Hygiene offers a graduate degree in dental hygiene. The online program of study requires 30 credit hours and confers a Master's of Science in Dental Hygiene (MSDH) degree. Courses in education and public health will culminate in the production of a researched thesis suitable for publication. Those holding a Master's of Science degree in Dental Hygiene advance their knowledge and expand their career choices in areas such as academic instruction, academic administration, public health, public health administration, and research.

Admission Requirements:

The institution is compliant with requirements outlined for inter-state authorization (SARA). Students who desire admission to the MSDH program will submit evidence of the following criteria:

1. An Associate of Science Degree in Dental Hygiene from a U.S. or Canadian Accredited Institution **and** a Bachelor of Science Degree in Dental Hygiene or

- a related field.
- 2. A minimum 3.0 overall and science grade point average.
- 3. A current dental hygiene license in at least one state.
- 4. One letter of recommendation from a previous or current employer.
- 5. Results from the Graduate Record Exam
- 6. Preference will be given to applicants with prior clinical experience.

6.2.c.2. Program Requirements:

The MSDH program of study includes thirty semester credit hours. In addition, forty-five hours of approved field work experience are required. This field work will be in either an accredited dental hygiene program or a public health agency with a dental focus. This requirement will be fulfilled in DH 506. An approved thesis will be a graduation requirement. Students must maintain a 3.0 grade point average and a letter grade of C or better in each course to remain in the program.

Master of Science Degree in Dental Hygiene

Core Curriculum.....	30 credit hours
*BIO 500 Biostatistic Applications.....	3 credit hours
*BIO 575 Grant Proposals in Science.....	3 credit hours
*DH 500 Organizational Leadership in the Healthcare Setting.....	3 credit hours
*DH 501 Current Epidemiologic Dental & Public Health Issues.....	3 credit hours
*DH 502 Evidence Based Research in Oral Health.....	3 credit hours
*DH 503 Dental Program Planning, Development & Implementation.....	3 credit hours
*DH 504 Contemporary Applications of Educational Technology.....	3 credit hours
*DH 505 Dental Hygiene Curriculum Design and Teaching Methods.....	3 credit hours
*DH 506 Internship in Dental Hygiene Education.....	1 credit hour
*DH 507 Thesis.....	5 credit hours

Course Descriptions and Timeline:

Course Descriptions are listed below. It will be possible to complete the MSDH program in five semesters if six credit hours are taken each semester. If students choose to take less than six hours per semester, the program will be extended.

Fall I Core Curriculum

***DH 500 Organizational Leadership in the Healthcare Setting3 credit hours**

This course presents an overview of leadership theories, and principles related to communication, personal behavior, organizational and leadership styles prevalent in dental and healthcare fields.

***DH 502 Evidence Based Research in Oral Health.....3 credit hours**

Current literature in the fields of dentistry and dental hygiene will be explored and evaluated. Research methodology will be discussed. Students will identify areas of research interest and submit project proposals for thesis consideration.

Spring I Core Curriculum

BIO 500 Biostatistic Applications.....3 credit hours

Analysis and application of parametric and non-parametric biostatistics through survey of primary literature and research design.

***DH 501 Current Epidemiologic Dental & Public Health Issues.....3 credit hours**

Emphasis on broad spectrum public health topics, epidemiology and their impact in oral health, including findings and recommendations from outbreaks, updates on emergent situations, findings from public health surveillance systems, guidelines from prevention services, review of acute and chronic, infectious and non- infectious public health problems.

Summer I Core Curriculum

***DH 504 Contemporary Applications of Educational Technology3 credit hours**

In-depth examination of instructional applications incorporating visual design, multimedia including digital imagery, audio, and video for face-to-face and online teaching and learning for the 21st Century student and classroom.

***DH 505 Dental Hygiene Curriculum Design and Teaching Methods....3 credit hours**

Provides graduate students with the opportunity to explore the methods and issues of clinical based teaching currently utilized in entry level dental hygiene education. Evaluation, assessment, competency based education. Clinical calibration and

accreditation standards will be introduced.

Fall II Core Curriculum

BIO 575 Grant Proposals in Science.....3 credit hours

Application of the fundamental conventions of science writing in grant proposals. Course is writing intensive and requires development of a proposal from concept to submission.

***DH 503 Dental Program Planning, Development & Implementation.....3 credit hours**

Students will focus on the skills to effectively plan, design and implement dental health programs that address public health problems for defined populations in a variety of settings.

Spring II Core Curriculum

***DH 506 Internship in Dental Hygiene Education.....1 credit hour**

Students will complete forty-five hours of approved field work experience in either a public health setting or dental hygiene education in an accredited program.

***DH 507 Dental Hygiene Thesis.....5 credit hours**

This capstone activity should demonstrate the writing, organizational and communication skills associated with the MSDH degree. The graduate student will conduct an extensive research project. Oral and written reports will be required, including oral defense of the project and submission of the project for a poster presentation at a regional or national meeting and/or submission for publication in a peer review journal.

6.2.d. Program Outcomes: Indicate the expected results of the program and, if this is a proposal for an expanded or modified program, specify how the proposed change may achieve results differed from those produced by the current program.

The WLU MSDH program will prepare professionals in the field of dental hygiene to assume leadership roles in healthcare and education.

- Graduates will be prepared to contribute to the body of knowledge in the field of dental hygiene through publication.
- Graduates will be prepared to lead programs to improve the oral health of populations at the local, state, and national levels.
- Dental Hygienists educated at the MSDH level will assure schools of dentistry and dental hygiene the ability to recruit and retain faculty to provide state of the art teaching and research opportunities.
- Dental Hygienists educated at the MSDH level will ensure a sufficient workforce pool to meet oral health care needs.

6.2.e. Program Content: The proposed educational program shall be compatible with the institutional mission. The relationship shall be described in document provided to the Commission.

This intended outcome previously listed under 6.2.d. supports the mission of the University to “provide our students the opportunity for a high quality undergraduate, graduate, and professional education”. Additionally, this program will support several of the following institution vision statements:

- **Providing extensive opportunity and a positive environment for a high quality undergraduate, graduate, and professional education;**
- **Providing its students the academic offerings necessary to meet the professional and career needs of an evolving, contemporary society;**
- **Achieving excellence in all facets of university life including academics, student experiences, athletics, visual and performing arts;**
- **Standing as a vigorous and vibrant source for the creation of knowledge through innovative and creative research and scholarly activity;**
- **Standing as an active member and contributor to the community through social, civic, and economic engagement activities that will include productive partnerships with K-12 schools, businesses, and nonprofit organizations.**

6.2 .e. 1. Content and Length:

The Master of Science Degree in Dental Hygiene consists of thirty semester credit hours. Additionally students will be required to complete forty-five hours of approved field work experience in either public health or dental hygiene education. Students will complete the degree program in two years encompassing two fall and spring terms and one summer term following the first spring semester.

6.2. e .2. General Education Component:

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 documents. N/A

6.2. e. 3. Minimum Requirement for General Education: N/A

6.3. Program Need and Justification

The Master of Science degree in Dental Hygiene will address the needs identified in the West Virginia Oral Health Plan 2010-2015. Dental professionals with advanced degrees are required to lead programs and initiatives designed to improve the oral health of constituents at the local, state and national levels. The existing infrastructure that currently supports a successful undergraduate program in dental hygiene will contribute to the implementation and success of a graduate degree program in the discipline of Dental Hygiene. Survey data collected during the needs assessment phase has demonstrated a need for this program from licensed professionals, alumni and current students. See Exhibit C

6.3.a. Relationship to Institutional Goals/Objectives: Relate this program to the institution’s goals and objectives and the statewide master plan.

The Master of Science Degree in Dental Hygiene will support several strategic goals of the University to include the following:

- Expand curricular opportunities to include high demand fields, the global economy, and professional development.
- Foster a robust environment that stimulates scholars and students toward creativity, research and innovation.
- Engage increasing numbers of students in higher education through expanding access and promoting opportunities available to traditional and nontraditional students and to adults.

This MSDH program will also support the West Virginia Oral Health Plan 2010-2015. The mission of the plan is to improve the oral health status of West Virginia by providing a structured approach to meeting the oral needs of everyone in the state. The West Virginia Oral Health Plan identified the need for dental professionals to lead this initiative. The plan objectives address the societal, occupational, research and public health service needs related to oral health that would benefit from having professionals who are educationally prepared to address the needs of the state. Of the seven objectives listed in the plan, objective number four addresses a condition that makes West Liberty a desirable and unique place for the initiation of the Master of Science Degree in Dental Hygiene. The highlighted areas of each strategy specifically address the benefit that the MSDH would provide in meeting the stated objective. Objective Four: The West Virginia Oral Health Program will strengthen and improve the dental health workforce.

Strategy 4:1 The West Virginia Oral Health Program will form a task force to study the following:

- The existing capacity and distribution of the oral health workforce to ensure oral health needs are met.
- How to extend or expand workforce capacity and productivity to address oral health in health care shortage areas.
- Ensure a sufficient workforce pool to meet oral health care needs.

Strategy 4:2 The West Virginia Oral Health program will develop a plan to address unequal distribution and shortage of dentists in rural areas including the following:

- Establish a uniform system for assessing oral health workforce capacity as one component of the oral health surveillance system.
- Assure capacity for schools of dentistry and dental hygiene to recruit and retain faculty to provide state of the art teaching and research opportunities.
- Recruitment and retention of dentists and dental hygienists.
- Need for continuing health education training programs for health care providers, school educators, and extension specialists.

The West Virginia master plan for higher education 2013-2018, *Leading the Way: Access, Success, Impact.*, defines a system that fosters “a state culture that values higher education as a means to individual, community, and economic development” while offering quality academic programs that prepare “productive and contributing members of society.” The proposed Master of Science in Dental Hygiene will offer a quality, rigorous program in the tradition of the long-standing Associate of Science and Bachelor of Science in Dental Hygiene degree programs currently offered at West Liberty University that supports the state master plan. The proposed

program will help meet the “pressing need for highly skilled graduates in the health sciences field” identified for the state. Additionally, the research component of the program will help “expand understanding of the world and [lead] to new solutions for society’s challenges” specifically in oral health fields. Overall the proposed Master of Science in Dental Hygiene degree program will increase the number of degrees awarded in the health fields at a reasonable cost for graduate education and with attention to accessibility of the program for working professionals by utilizing a web based format for program delivery.

6.3.b. Existing Programs: List similar programs in West Virginia.

West Virginia University currently offers the MSDH program. Adjoining states of Pennsylvania and Kentucky do not offer the MSDH program. Maryland, Ohio, and Virginia each currently have one MSDH program. The location of West Liberty University in the northern panhandle of the state coupled with the intended web based format will afford prospective students from adjoining states the opportunity for an advanced dental hygiene degree. See Exhibit A [National MSDH Programs](#)

6.3.c. Program Planning and Development: Indicate the history to date of the development and submission of the program proposal. What resources have already been invested in this program? What planning activities have supported this proposal?

The intent to plan was accepted in May 2013. There have been no resources invested in the planning of this program other than manpower hours through meetings with faculty and administrators of the University. See Exhibit B

6.3.d. Clientele and Need: Describe the clientele to be served and state which of their specific needs will be met by the program. Indicate any special characteristics, such as vocation, or academic background. Indicate manpower needs, interest on the part of the industry, research and other institutions, governmental agencies, or other indicators justifying the need for the program.

The needs of several populations will be met by this academic program. The community of dental patients served by the profession of dental hygiene will benefit from the MSDH program. The advanced knowledge of a MSDH prepared dental hygienist with expertise in the areas of education will assist in providing qualified educators to support current and future dental hygiene programs. The MSDH prepared dental hygienist with expertise in public health will assist in meeting the underserved oral health needs of our state and nation through needs assessment, program planning and development with emphasis on health care policies and the management of such programs.

The report published by the US Surgeon General in 2000, Oral Health in America highlighted the poor condition of oral health of Americans. The report noted a lack of public health trained practitioners with oral health knowledge. In December of 2010, Healthy People 2020 was an initiative published by the Department of Health and Human Services that outlines objectives to address current threats to health and goals to reduce such threats. The following three objectives support the improvement of oral health:

- Increase awareness of the importance of oral health to overall health and well-being.
- Increase acceptance and adoption of effective preventive interventions.
- Reduce disparities in access to effective preventive and dental treatment services.

All three objectives could be addressed by preparing dental hygienists to participate in leadership

roles in public policy, oral health care program planning and education.

Two reports published by the Institute of Medicine support the need for educated dental hygiene professionals. *Advancing Oral Health in America* and *Improving Access to Oral Health Care for Vulnerable and Underserved Populations* reference the importance of oral health education and public health action to address the current condition of oral health in America.

6.3.e. Employment Opportunities: Present a factual assessment of the employment opportunities that are likely to be available to program graduates. Include data and references supporting this assessment. Indicate the types and number of jobs for which such a curriculum is appropriate.

The ASTDD, Association of State and Territorial Dental Directors, in the July 2014 2012-2013 summary, provided a synopsis of demographics, infrastructure, workforce, administration, and oral health programs. ASTDD reports that the age and income groups that have unique oral health needs are the elderly (65 years and older), the young (5-17 years), and the low income. Forty-four states provide oral health services for 100,000 or greater children. Elderly populations make up ten to twenty percent of 49 States. The percent of children under 18 in families at 125% below federal poverty level range from 20->30 % in 35 states. Even with these large numbers 39 states have less than 100 dental clinics providing service for low income families, with 26 having less than 50 clinics. Twenty-six states have 25% or greater local and state agencies managed by dental public health. The ratio of hygienists to population is 1/1500 or greater in 28 states. With these staggering numbers it is obvious there is a critical need for public dental health.¹ In conjunction with these staggering statistics, the U.S. Bureau of Labor Statistics projects the employment of dental hygienists to grow 33 percent from 2012 to 2022.² Currently there are job opportunities found through the American Dental Hygienists' Association (ADHA) and USAJOBS (The Federal Government's Official Jobs Site) that are not limited to: Program Manager-Clinical Programs, State Dental Director-Hawaii, Oral Health Director for the State of Vermont, Adjunct Instructor of Public Health, Department of Public Health-A.T Still University (ATSU), Clinical/Community Health Dental Hygienist, Dental Hygienist for the Indian Health Service, Federal Prisons Systems, and the U.S. Army Medical Command. There are a variety of positions for dental hygienists with advanced degrees nationally and the projection is that these opportunities will continue to increase over the next decade.

¹Association of State and Territorial Directors. Summary Report Synopses of State Dental Public Health Programs Data for FY 2012-2013. July 2014

²Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2014-15 Edition, Dental Hygienists, on the Internet at <http://www.bls.gov/ooh/healthcare/dental-hygienists/htm> (visited November 05, 2014).

6.3.f. Program Impact: Describe the impact of this program on other programs that it will support or that will be supported by it.

The current AS and BS degree programs in dental hygiene will support the MSDH program in various ways. Current faculty may provide instructional support for the proposed MSDH

program. Graduates of the current BS degree program will be prepared academically to enter into the advanced degree program. Past survey data have demonstrated the interest of local graduates to attain an advanced degree in dental hygiene. Local students who enroll in the program will benefit from the operational clinical facilities and the ability to actively participate in the undergraduate education process. Teaching assistantships may provide students an opportunity for income and valuable educational experiences. Exhibit C Survey Data

6.3.g. Cooperative Arrangements: Describe any cooperative arrangements (including clinical affiliations, internship opportunities, personnel exchanges, and equipment sharing) that have been explored.

Because the curriculum will be web based, additional clinical affiliations and internships may be required for students who live outside of the local area. There are currently 335 entry level dental hygiene programs within the United States. Affiliation agreements will be required from accredited institutions that may provide learning experiences for students during DH 506. Affiliation agreements will be developed in cooperation with students dependent on their geographical location.

http://www.adha.org/resources-docs/72611_Dental_Hygiene_Education_Fact_Sheet.pdf

6.3.h. Alternatives to Program Development

No alternatives to the development of this program have been considered or rejected.

6.4. Program implementation and Projected Resource Requirements

Program Implementation will begin the first fall following approval by all necessary entities. The curriculum is designed to be completed in two academic years. Resource requirements will include personnel, office space, and computer equipment.

6.4.a Program Administration: Describe the administrative organization for the program and explain what changes if any, will be required in the institutional administrative organization.

The administration for the MSDH program will consist of a Program Director who will assume teaching responsibilities. The program director will report to the Dean of the College of Sciences.

6.4.b Program Projections: Indicate the planned enrollment growth and development of the new program during the first five years. (Form 1) Include a plan for sustainability of the program after the initial five (5) year start-up.

Initial plan for enrollment of the inaugural class is for five students. Admission will occur one time each year during the fall term. Evaluation of an increase in enrollment will be investigated after the graduation of two classes.

6.4.c Faculty Instructional Requirements: Indicate the number, probable rank, experience and cost of faculty required over the five (5) year period.

The faculty member holding the title of Program Director of the MSDH program will be awarded an \$8000.00 stipend. Faculty will hold a Master of Science Degree in Dental Hygiene.

Rank and salary will be determined based on previous teaching experience. It is anticipated that current dental hygiene faculty and other appropriate University disciplines will be given the opportunity to participate in the delivery of graduate degree courses. If and when current faculty teaching loads exceed the maximum hours, overload compensation will be required. Adjunct professors will be hired as necessary at \$1000.00 per credit hour. It is important that current faculty to student ratios required by the ADA Commission on Dental Accreditation not be affected in the current undergraduate degree program by faculty assuming additional responsibilities for the MSDH program.

6.4 d Library Resources and Instructional Materials: Evaluate the adequacy of existing library resources and instructional materials for the proposed program. Estimate the nature and probable cost of additional resources necessary to bring the proposed program to an accreditable level.

The current library resources and instructional materials required for the AS and BS degree programs in dental hygiene program are adequate for the MSDH program and are freely accessible online/electronically. Currently, the Master of Science Degree in Dental Hygiene is not a program requiring accreditation by the ADA Commission on Dental Accreditation. See Exhibit D Library Resources

6.4.e. Support Service Requirements; Indicate the nature of any additional support services (e.g., laboratories, computer facilities, equipment, etc.) likely to be required by the proposed program. Include the expected costs, and describe how such expansions will be incorporated into the institutional budget.

The proposed program will be delivered in an asynchronous manner. Therefore, the addition of computer hardware or equipment may be needed for teaching faculty.

Describe any student support services that will be put into place to enhance student retention and successful program completion for this new program.

Each student will be assigned an advisor who will mentor the graduate student throughout the program. The office of E-Learning at the University will provide assistance to students as needed. All newly developed courses for the proposed MSDH will have a standard, web-based format using the institutional learning management platform, Sakai, to facilitate student learning and retention. This formatting and additional course review ensures that each course conforms to Quality Matters standards and provides consistent formatting that can be thoroughly introduced via an online orientation to the program.

The West Liberty University IT Helpdesk provides a wide variety of services to the students, faculty, and staff of West Liberty University. The Help Desk is the first point of contact for faculty, staff and students who need computer or telephone assistance. E-mails (helpdesk@westliberty.edu), phone calls (304-336-8886) and walk-ins (Main Hall, MB39) are all welcome. The Helpdesk currently provides technical support for platforms including, but not limited to, Windows and Macintosh. Software support is also provided for the Microsoft Office Suite.

The Learning and Student Development Center is committed to motivating students to be successful, providing avenues for academic and cultural support, and developing opportunities for connecting students to the West Liberty University community. In this developmental

process, students are encouraged to engage in programs and services that will help them realize their potential. The Learning and Student Development Center blends the following offices and services to address student's needs and assist in a positive college experience.

Accessibility Services

Career Services

Counseling Services

Miller Analogies Test (MAT)

Parent Information

Tutoring Services

6.4.f. Facilities Requirements: Indicate whether the program will require addition of new space of facilities of the remodeling or renovation of existing space. If so provided a statement detailing such plans and space needs and their estimated funding requirements. Describe the impact of this new program on space utilization requirements.

The program will be delivered exclusively online, therefore, additional space for instruction will not be required. The program may require office space for adjunct faculty. Currently, campus office space is available to meet the proposed needs.

6.4.g. Operating Resource Requirements: using Form 2, provide a summary of operating resource requirements by object of expenditure. See Exhibit E

The MSDH program will require the appointment of a current dental hygiene faculty member who will act as the Program Director and assume teaching responsibilities. The Dean of the College of Sciences shall appoint the faculty member who will serve in this position. The Program Director will receive a stipend of \$8000. Additional teaching duties will be assumed by current West Liberty University faculty members and adjuncts. Faculty members and adjuncts will receive \$1000 per credit hour with a projected 1.5% increase in years three through five. Additional support will come from current West Liberty University staff members in the Office of Graduate Admissions, Help Desk, and the Office of E-learning for technical support. There are no Graduate Assistant positions at this time, however, that could change as the program is implemented. Current expenses will include costs associated with marketing, office supplies, and postage. Educational equipment will include additional computer hardware and equipment, textbooks, and additional resources needed to provide online instruction. The existing electronic databases through the University's library will be sufficient for MSDH studies and thesis preparation. Sources of funding will be generated through tuition rates of \$500 per credit hour for in-state tuition and \$800 per credit hour for out-of-state tuition with a 5% tuition increase years three and five. Assumptions for calculations include three in-state students and two out-of-state students with an attrition rate of one out-of-state student per year. The program is projected to be self-sustaining through the generation of program tuition.

6.4.h. Source of Operating Resources: Indicate the source of operating resource requirements if the service levels are to reach those projected in Form 1. Describe any institutional plans to reallocate resources to the program in each year of the five (5) year period. Describe the supplementary resource needs that are beyond the usual or expected institutional allocations that are derived through the regular budget request process. See Exhibit E

At the inception of the MSDH program five FTE students will be accepted for a total of 90

student credit hours. During the second year, assuming an attrition rate of one student, four students will continue in the program for their second year with an additional five new students beginning the program for a total of 138 student credit hours years two through five. Four degrees are to be granted beginning year two and continuing through the program.

6.5 Program Evaluation: A meeting to assess program effectiveness will be held annually and adjustments to the program will be made as needed. Assessment will include review of goals, curriculum, and student learning outcomes. Direct and indirect assessment measures will be utilized.

6.5a. Evaluation Procedures: Indicate the evaluation or review guidelines, procedures, schedule and assessment measures that will be used for this program. Criteria and standards for program evaluation will vary according to the level and purpose of the program. The evaluation should address the viability, adequacy, and necessity of the program in relation to the mission of the institution. Both qualitative and quantitative indicators are important. Among the measures may also be the value of the program to the State and its people, its roles in contributing to human development, and its social utility in contributing to further development of West Virginia.

The evaluation of the MSDH Program will be evaluated by the guidelines demonstrated in the Assessment Plan Matrix. The Assessment Plan Matrix aligns student learning outcomes with courses, timelines and evaluation methods. Results and planned program improvements will be added to the matrix as a result of data analysis. **See Exhibit F**

Courses with Assessment

BIO 500 Biostatistic Applications 3 credit hours

Analysis and application of parametric and non-parametric biostatistics through survey of primary literature and research design.

Learning Objectives:

Through successful completion of the course, students will

1. Differentiate parametric and non-parametric statistical analyses.
2. Analyze the statistical methodologies used in primary research publications for applicability.
3. Identify statistical methods and support the appropriateness of these methods to assess the validity of a proposed research design.

Assessment: Analysis of primary literature statistical application. Students will determine rationale underlying statistics in a peer-reviewed research article.

Assessment: Research design. Students will identify and evaluate a potential research problem, design an approach to address the research problem, and identify and explain the appropriate statistics required to assess validity of results.

BIO 575 Grant Proposals in Science 3 credit hours

Application of the fundamental conventions of science writing in grant proposals. Course is writing intensive and requires development of a proposal from concept to submission.

Learning Objectives:

Through successful completion of the course, students will

1. Identify funding sources/grant databases relevant to their field of study.
2. Prepare a grant proposal following appropriate guidelines in an area relevant to their field of study.
3. Evaluate feedback and reflect on potential improvements to proposal.

Assessment: Grant proposal. Students will identify, evaluate, and prepare a grant proposal relevant to the field of study. Proposal will follow guidelines established by the funding agency. Prepared proposals will be evaluated by reviewers similar to actual grant funding processes; students will receive a rating indicative of funding potential and feedback from proposal review.

DH 500 Organizational Leadership in the Healthcare Setting 3 credit hours

This course presents an overview of leadership theories, and principles related to communication, personal behavior, organizational and leadership styles prevalent in dental and healthcare fields.

Learning Outcomes:

As a result of this course students will be able to:

1. Discuss the perception of those who lead and those who follow.
2. Define leadership.
3. The student will identify individual leadership skills he/she possesses.
4. Define the importance of the changing context related to healthcare.
5. Compare leadership and management.
6. Debate the art and science of leadership.

Assessment:

1. Present debate topics on the perceived roles of leaders and followers
2. Create a paper summarizing the value of leadership within the healthcare system.
3. Given a dilemma in need of leadership skills write a paper on the steps involved in resolving the said problem including specific skills utilized by the student.

DH 501 Current Epidemiologic Dental & Public Health Issues 3 credit hours.

Emphasis on broad spectrum public health topics and their impact in oral health, including findings and recommendations from outbreaks, epidemiology, updates on emergent situations,

findings from public health surveillance systems, guidelines from prevention services, review of acute and chronic, infectious and non- infectious public health problems.

Learning Outcomes:

As a result of this course students will be able to:

1. Evaluate programs to reduce risks and promote health that are appropriate to health status and ability, age, gender, ethnicity, social, economic, cultural factors, and available resources.
2. Use epidemiological, social and environmental data to evaluate the oral health status of individuals, families, groups, and communities.
3. Incorporate health promotion theories and translational research in developing teaching and oral health counseling strategies that preserve and promote health and healthy lifestyles.
4. Foster inter-professional collaborations to optimize health for individuals and/or communities.
5. Evaluate the impact of oral disease on overall health to determine patient or community risk and in the development of intervention and prevention strategies to optimize positive health outcomes.

Assessments:

1. Critique two health promotion theories that promote healthy lifestyles. One should specifically focus on healthy oral health promotion. Evaluate these programs effectiveness in reducing risks and their appropriateness to various ages, genders, cultures, social and economic status.
2. Present a paper on oral health status of individuals, families, groups and communities using epidemiological, social and environmental data.
3. Create and customize a dental health promotion program for a specific community, group, or population.

DH 502 Evidence-Based Research in Oral Health 3 credit hours

Current literature in the fields of dentistry and dental hygiene will be explored and evaluated. Research methodology and evidence based decision making will be discussed. Students will identify areas of research interest and submit project proposals for thesis consideration.

Learning Outcomes:

As a result of this course, students will be able to:

1. Discuss the evidence-based process in relation to dental hygiene research literature.
2. Analyze a variety of dental hygiene research articles including those in the area of research interest.

3. Employ evidence-based critical appraisal methods to evaluate a variety of dental hygiene research articles for research design, methodology, and risk of bias (formerly validity & quality of study).
4. Develop a dental hygiene research proposal for thesis consideration.

Assessments:

1. Compose a written one-page paper that explores dental hygiene research from the evidence-based perspective.
2. Summarize and evaluate 3-5 research articles in the dental/dental hygiene field.
3. Discuss and critique selected research (3-4 articles) in your area of focus on the course forum site. Respond to two other students using critique and evaluation.
4. Write critiques of dental hygiene research articles using evidence-based critical appraisal techniques in the area of research focus research design and methodology.
5. Summative: Develop and present to the class a research proposal for thesis consideration.

DH 503 Dental Program Planning & Implementation 3 credit hours

Students will focus on the skills to effectively plan, design and implement dental health programs that address public health problems for defined populations in a variety of settings.

Learning Outcomes:

After completing this course, the student will be able to:

1. Statistically compare and contrast dental public health trends at the local, state and national levels.
2. Survey local and state community resources to identify agencies and constituents that would support a community dental public health program.
3. Statistically analyze community dental health programs' effectiveness and utilization.

Assessment:

1. Write a two page paper comparing and contrasting national and statewide oral health disparities. Post one proposed intervention to a national or statewide oral health disparity and respond to two classmates posts.
2. Develop a community dental health program that will addresses local disparities based on state and national trends.
3. Collaborate with local and state constituencies and allocate resources to be utilized for your proposed community dental health program.
4. Create and post a cost-benefit and cost-effectiveness table supporting your utilization of secured resources. Respond to two other posts, one defending and one arguing the financial structure provided by a classmate.

5. Post a comprehensive assessment of the community dental health program implemented and evaluate its strengths and weaknesses. Post responses to two classmate's assessment making recommendations for future programs.

DH 504 Contemporary Applications of Educational Technology 3 credit hours

In-depth examination of instructional applications incorporating visual design, multimedia platforms to include digital imagery, audio, and video for face-to-face and online instruction and learning.

Learning Outcomes:

As a result of this course, students will be able to:

1. Effectively use a variety of current and emerging educational software technology applications (Including, but not limited to: MS Office style tools, Google office tools, multimedia, a variety of Web 2.0 elements, safe copyright use, and the WLU learning platform) to support dental hygiene teaching and learning in face-to-face and online teaching environments.
2. Use online collaborative tools to clarify student understanding of dental hygiene concepts, enhance student reflection and encourage critical thinking.
3. Design and evaluate dental hygiene learning activities using digital tools and resources that utilize students' diverse learning styles and abilities.
4. Develop and evaluate assessments and authentic learning experiences that incorporate current and emerging educational technologies to maximize dental hygiene content learning in context.

Assessments:

1. Create one lesson plan and accompanying rubric with a rubric generator site for a student centered Forum assignment and upload to Scribd: embed on to website.
2. Develop a presentation using multimedia and digital images in your specific dental hygiene unit of study and share with classmates via the course Forum and post on SlideShare. (or similar Web 2.0 site.)
3. Record a 3-5 minute video tutorial on how to use an educational technology web tool of your choice. Upload to YouTube and then embed on to website.
4. Create a test or survey in Google docs for dental hygiene student use: embed on to website and also input into Sample Sakai site (or current learning platform).
5. Summative assessment: Create a website for a dental hygiene educational course that will showcase your use of emerging technologies and Web 2.0 work for application in dental hygiene education: plan for a specific dental hygiene unit of study.

DH 505 Dental Hygiene Curriculum Design and Teaching Methods 3 credit hours

Provides graduate students with the opportunity to explore the methods and issues of clinical based teaching currently utilized in entry level dental hygiene education. Evaluation, assessment,

competency based education. Clinical calibration and accreditation standards will be introduced.

Learning Outcomes

As a result of this course, students will be able to:

1. Identify accreditation standards and methods of demonstrating compliance.
2. Examine and discuss clinical assessment methods.
3. Discuss competency based Dental Hygiene education.
4. Define clinical remediation and discuss options for implementation.
5. Define clinical calibration and discuss methods appropriate for teaching dental hygiene clinical skills.

Assessments:

1. Students will review the ADA Commission on Dental Accreditation. Students will be assigned an accreditation standard and write an appropriate response to demonstrate compliance.
2. Student will review the literature and investigate clinical assessment methods utilized in Clinical dental hygiene education.
3. Students will develop an Objective Structured Clinical Exam that could evaluate a dental hygiene clinical process.
4. Students will review current dental literature on a dental hygiene competency based curriculum.
5. Students will identify the Five Competency Domains as defined by the American Dental Educator's Association.
6. Students will develop competency statements for each of the five domains.
7. Students will define remediation and identify areas of clinical dental hygiene education that may require prescriptive remediation. Students will identify appropriate components of a remediation policy. When given a case history, students will develop a remediation plan for a dental hygiene student.
8. Students will review the current dental literature on the faculty calibration of clinical dental hygiene skills. Students will evaluate sample clinical calibration exercises and discuss challenges of implementation. Students will develop and present a calibration exercise that could be utilized in dental hygiene education.

DH 506 Internship in Dental Hygiene Education 1 credit hours

Students will complete forty-five hours of approved field work experience in either public health or dental hygiene education in an accredited dental hygiene program. Prior approval must be granted on site location and an agreement made between the internship location and the course instructor.

Learning Outcomes:

As a result of this course, students will be able to:

Dental Hygiene Education Internship

1. Summarize the qualities of an effective clinical instructor.
2. Describe methods of clinical instructions.
3. Summarize the role student/teacher conflict plays in clinical education.
4. Demonstrate the role of appropriate clinical instruction through the preparation of student learning outcomes, the presentation of lectures, demonstration of clinical skills and the development of rubrics for measurement.
5. Demonstrate leadership skills and interprofessional collaboration with administration, faculty and students in the chosen internship organization.

Public Health Internship

1. Summarize the qualities of an effective dental public health coordinator.
2. Describe obstacles to implementing a public health program.
3. Explain the role of a dental hygienist in the public health setting.
4. Understand the policies associated with dental public health.
5. Compare and contrast dental public health with private practice.
6. Demonstrate leadership skills and interprofessional collaboration with administration, employees and clients in the chosen internship organization.

Assessment:

1. The student will complete a daily journal documenting hours worked and daily activities completed.
2. The student will write a five page paper reflecting on the internship. The paper will include a description of the field work experience, positive and negative experiences, obstacles encountered, specific examples of duties assigned from the supervisor, and a reflection of the learning experience.
3. The supervisor at the approved facility will complete a provided evaluation of the student at the completion of the required forty five hours.

DH 507 Thesis 5 credit hours

This capstone activity should demonstrate the writing, organizational and communication skills associated with the MSDH degree. The graduate student will conduct an extensive research project. Oral and written reports will be required, including oral defense of the project and submission of the project for a poster presentation at a regional or national meeting and/or submission for publication in a peer review journal.

Student Learning Outcomes

As a result of this course, students will be able to:

1. Construct a thorough review of Dental Hygiene literature using evidence-based appraisal techniques in the selection, analysis, and evaluation of the literature evidence to apply to your selected thesis topic in community health, education, or to the clinical practice of dental hygiene.

2. Develop and perform independent research on your selected thesis project topic that advances a new point of view in dental hygiene and demonstrates graduate level performance.
3. Create an analytical introduction and abstract for the thesis research paper that briefly summarizes your approved thesis topic, concepts, methodology and materials, and the results of your research.
4. Write a scholarly thesis for publication on your master's thesis research project that demonstrates graduate level writing and evaluation skills in proposal development and writing.

Assessments:

Assessments are designed to guide students through the development of their thesis document and performance of thesis research.

1. Write a focused Review of Literature section of your thesis document with emphasis on analysis of the evidence literature and graduate level writing skills. (Again, this may have been done in DH 501)
2. Create an outline that gives an overview of the main points of your thesis. Through supervision sessions with your thesis advisor this may require revision as you conduct your research.
3. Submit your thesis research proposal to the University Institution Review Board.
4. Write a thesis research journal on a weekly or biweekly basis that reflects on the implementation of your thesis research, data management, and analysis for review with your thesis advisor at regular meeting intervals. Your journal must show how your choice of design and research method is suited to answering your research question(s), and demonstrate that you have given due consideration to the validity and reliability of your chosen method(s).
5. Write the analytical Introduction, and Abstract section of your thesis document with a focus on graduate level writing skills and publication format.
6. Summative Assessment: Present your completed written thesis document as prepared for publication to your candidate's Thesis Committee and orally defend your research methods and findings.

6.5. b. Accreditation Status: Indicate the accrediting agency for the proposed program, the schedule for initiating and receiving accreditation, and the costs of each stage of the process. Attach to the proposal the statement of standards used by the accrediting agency for such a program and how each accreditation standard will be addressed within the proposed program.

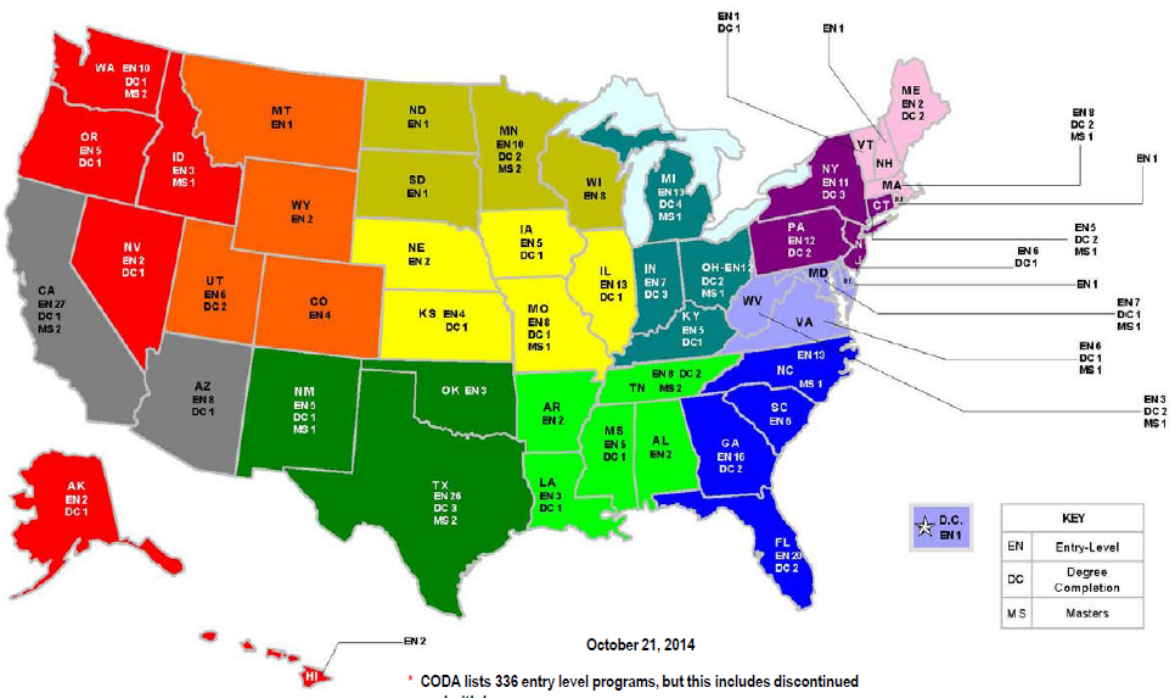
There is currently no accreditation for the Master of Science Degree in Dental Hygiene.

EXHIBITS

EXHIBIT A
EXISTING PROGRAMS

Dental Hygiene Education Facts

Dental Hygiene Education Programs by State by Degree 2014^{5,7}



5. American Dental Hygienists' Association 2013 Dental Hygiene Program Survey.
7. Commission on Dental Accreditation (CODA) Allied Programs List – August 7, 2014.

**EXHIBIT B
PROGRAM PLANNING AND DEVELOPMENT**

Intent to Plan	May 2013
Completed Proposal	May 2016
Curriculum Committee Approval	September 13, 2016
Faculty Senate Approval	September 20, 2016
Board of Governors Approval	October 5, 2016

**EXHIBIT C
SURVEY DATA**

**2015 Dental Hygiene Exit Survey
27 surveys**

Graduate Education		
I Master of Science Degree in Dental Hygiene		
--New Question--	NA No Yes	15% 4% 81%
1 Will you graduate with a BS degree in May?	No Yes	44% 56%
2 Are you interested in continuing your dental hygiene education after graduation in May?	NA No Yes	4% 19% 78%
3 Are you interested in earning a Master's of Science Degree in Dental Hygiene?	NA No Yes	7% 37% 56%
4 Are you interested in earning a Master's Degree in a discipline other than Dental Hygiene?	NA No Yes	7% 63% 30%
5 If West Liberty University would offer a Master's Degree Program in Dental Hygiene, would you be interested in enrolling in such a program?	NA No Yes	11% 22% 67%
6 For a Master's Degree in Dental Hygiene, would you prefer a web based program instead of a traditional face to face classroom delivery?	NA No Yes	19% 7% 74%

Comment

Masters Program online would be a great addition.

**2016 Dental Hygiene Exit Survey
22 Surveys**

Graduate Education		
Master of Science Degree in Dental Hygiene		
--New Question--	NA Yes	9% 91%
1 Will you graduate with a BS degree in May?	No Yes	14% 86%
2 Are you interested in continuing your dental hygiene education after graduation in May?	NA No Yes	5% 45% 50%
3 Are you interested in earning a Master's of Science Degree in Dental Hygiene?	NA No Yes	9% 36% 55%
4 Are you interested in earning a Master's Degree in a discipline other than Dental Hygiene?	NA No Yes	5% 73% 23%
5 If West Liberty University would offer a Master's Degree Program in Dental Hygiene, would you be interested in enrolling in such a program?	No Yes	14% 86%
6 For a Master's Degree in Dental Hygiene, would you prefer a web based program instead of a traditional face to face classroom delivery?	NA No Yes	5% 23% 73%

Comment

A web based master's program would be much more convenient than a traditional classroom setting. I guarantee I would not enroll in the master's program if I had to commute to West Liberty for the program

EXHIBIT D
LIBRARY RESOURCES
DATABASES & DIGITAL COLLECTION

- [Academic Search Complete](#)
- [Business Source Elite](#)
- [Communication and Mass Media Complete](#)
- [Criminal Justice Abstracts](#)
- [Dentistry & Oral Sciences Source](#)
- [Ebsco eJournal List](#)
- [ERIC](#)
- [Library Catalog \(TopperCat\)](#)
- [MasterFILE Premier](#)
- [Medline Complete](#)
- [MLA Directory of Periodicals](#)
- [MLA International Bibliography](#)
- [Newspaper Source](#)
- [Nursing/Academic Edition](#)
- [Points of View](#)
- [PubMed](#)
- [Proquest](#)
- [SPORTDiscus](#)
- [Teacher Reference Center](#)
- [WV Infodepot](#)

EXHIBIT E

**Operating Resource Requirements
Form 2**

A. FTE Positions	First Year 2018	Second Year 2019/20	Third Year 2020/21	Fourth Year 2021/22	Fifth Year 2022/23
1. Administrators	.25	.25	.25	.25	.25
2. Full-time Faculty #	0	0	0	0	0
3. Adjunct Faculty	.40	.40	.40	.40	.40
4. Graduate Assistants	0	0	0	0	0
5. Other Personnel					
a. Clerical workers	.063	.063	.063	.063	.063
b. Professionals	0	0	0	0	0

Current WLU Faculty Members will assume .60 teaching responsibilities and will receive a \$1000 stipend per credit hour. Additional Adjunct Faculty will be hired to teach .40 of the responsibilities.

B. Operating Costs	First Year 2018	Second Year 2019/20	Third Year 2020/21	Fourth Year 2021/22	Fifth Year 2022/23
1. Personal Services					
a. administrators	8,000	8,000	8,240	8,487.20	8,741.82
b. Full-time Faculty #	0	0	0	0	0
c. Adjunct Faculty	24,500	39,500	40,122.30	40,755.24	41,398.39
d. Graduate Assistants	0	0	0	0	0
e. Non-Academic Personnel					
Clerical Workers	0	0	0	0	0
Professionals	0	0	0	0	0
Total Salaries	32,500	47,500	48,362.50	49,242.44	50,140.21

#Adjunct faculty will cover current Faculty Member's stipends and additional costs for benefits

2. Current Expenses	4,000	4,000	4,000	4,000	4,000
3. Repairs and Alterations	0	0	0	0	0
4. Equipment					
a. Educational Equipment	3,000	1,500	1,500	1,500	1,500
b. Library Books	0	0	0	0	0
5. Nonrecurring Expense	0	0	0	0	0
Total Costs	39,500	53,000	53,862.50	54,742.44	55,640.21

C. Sources	First Year 2018	Second Year 2019/20	Third Year 2020/21	Fourth Year 2021/22	Fifth Year 2022/23
1. General Fund Appropriations	0	0	0	0	0
2. Federal Government	0	0	0	0	0
3. Private and Other	55,800	83,400	87,570	87,570	91,948.50
Total All Sources	55,800	83,400	87,570	87,570	91,948.50

**Source of Operating Resources
Form 1**

	First Year 2018	Second Year 2019/20	Third Year 2020/21	Fourth Year 2021/22	Fifth Year 2022/23
Number of Students Served through Course Offerings of the Program					
Head Count	5	9	9	9	9
FTE	5	9	9	9	9
Student Credit Hours	90	138	138	138	138
Number of Majors					
Head Count	5	9	9	9	9
FTE	5	9	9	9	9
Student Credit Hours	90	138	138	138	138
Number of degrees to be granted (annual total)	0	4	4	4	4

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Follow-up Program Review Graduation Hours

INSTITUTIONS: Bluefield State College, Potomac State College of West Virginia University, West Liberty University, West Virginia University, and West Virginia University Institute of Technology

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Mark Stotler

BACKGROUND:

At its meeting on November 20, 2015, the Commission received a report on program review. As part of the Commission’s goal to reduce program graduation hours for baccalaureate programs, the Commission requested follow-up reports for baccalaureate programs that exceeded 120 hours. The list of programs identified in that review period is provided below.

Institution	Program	Current Hours	Previous Hours
Bluefield State College	A.S. Nursing	67	67
West Liberty University	A.S. Dental Hygiene	79	79
	B.S.N. Nursing	124	129
West Virginia University	B.S. Dental Hygiene	133	136
	B.S.L.A. Landscape Architecture	136	136
	B.S.N. Nursing	123	129
	B.S. Speech Pathology & Audiology	120	128
Potomac State College of WVU	A.A. Education	60-64	64
	A.A. Engineering	60	67-70
	A.A. Forestry	60	62-63
WVU Institute of Technology	B.S.N. Nursing	123	129
	B.S. Criminal Justice	120	127-129
	B.A. Psychology	120	128

The table reflects that several programs have been able to meet Commission goals for graduation hours. Most programs have been able to reduce the number of hours required for graduation. A rationale is provided below for programs that still exceed Commission goals:

Bluefield State College

- ***A.S. Nursing***

The program underwent major curriculum revision in 2014-2015. The number of credit hours required for graduation was reduced from 71 to 67. Accreditation standards make it difficult for further reductions at this time.

West Liberty University

- ***B.S.N. Nursing***

Hours were reduced from 129 to 124 following a revision to the curriculum in 2012 to align courses with accreditation standards. The changes enhanced preparation. A further reduction in hours is not justified until additional assessment data on outcomes can be compiled.

- ***A.S. Dental Hygiene***

In order to continue meeting accreditation standards and based on outcome data, no change to the required number of credit hours are anticipated.

West Virginia University

- ***B.S. Dental Hygiene***

Following implementation of the General Education Foundation curriculum, the required number of hours was reduced from 136 to 133. Due to accreditation standards, no further reductions are anticipated.

- ***B.S.L.A. Landscape Architecture***

Hours are dictated by accreditation. The number of hours is typical for programs nationwide.

- ***B.S.N. Nursing – (WVU and WVU Tech)***

The new General Education Foundation curriculum has reduced the total hours of the programs from 129 to 123. Due to accreditation standards no further reductions are anticipated.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Statewide College Access and Success Initiatives Report

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Adam Green

BACKGROUND:

The Division of Student Affairs coordinates several projects aimed at assisting students in navigating college processes and pathways. Staff will provide an update on recent and upcoming college access and student success initiatives, including the following:

College Planning Pathway Events: Through its College Foundation of West Virginia (CFWV) outreach initiative, the Division of Student Affairs coordinates three annual statewide college planning pathway events to assist families in planning, applying, paying, and preparing for postsecondary programs. The first event, “College Application and Exploration Week,” was held in schools across the state from October 31 through November 4, 2016 and focused on helping students explore postsecondary options and submit applications.

The second series of events include multiple financial aid awareness and assistance events that will help families complete financial aid application forms including the Free Application for Federal Student Aid (FAFSA). Additionally, through a grant funded by the National College Access Network, staff are working closely with Kanawha County high schools to pilot a series of unique financial aid and FAFSA completion interventions.

The third event, College Decision Day, will be held during the months of April, May and June 2017 and will celebrate college-bound students while providing them with information and resources to help them transition to college.

GEAR UP Federal Grant (2014-2021): West Virginia GEAR UP is a federally funded program that helps students in ten counties prepare to succeed in education and training beyond high school. “GEAR UP” stands for “Gaining Early Awareness and Readiness for Undergraduate Programs,” and the program’s goal is to help more students pursue their dreams of earning a college diploma or skillset certificate.

West Virginia GEAR UP is managed by the West Virginia Higher Education Policy Commission (Commission), in collaboration with the West Virginia Council for Community and Technical College Education (Council), the West Virginia Department of Education, the West Virginia Department of Education and the Arts and many other community

partners. The GEAR UP program operates on seven-year cycles.

Office of Veterans Education and Training 5 Star Challenge: Last year, the Commission and Council launched a public recognition campaign to encourage public institutions to adopt and implement a set of standards aimed at creating an environment that supports student veterans and accommodates the unique needs of this population.

The campaign, the “5 Star Challenge,” is based on the military tradition of issuing “challenge coins” within military units. Challenge coins are symbolic tokens given to individuals who exemplify the values, goals and culture of the unit.

College Counseling Via Text Message: In 2014, Commission staff began a program to provide college counseling and reminders to complete key college tasks via text messaging. In the initial year, the program was limited to those schools served by the GEAR UP program. It is now a statewide offering, providing services and support to more than 11,000 students. Early outcomes indicate that students who received support through text messaging in the project’s first year were more likely to attempt and complete a higher number of college courses and to earn slightly higher grade point averages.

COLLEGE FOUNDATION OF WEST VIRGINIA

ADMINISTERED BY THE WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

ECONOMIC IMPERATIVE:



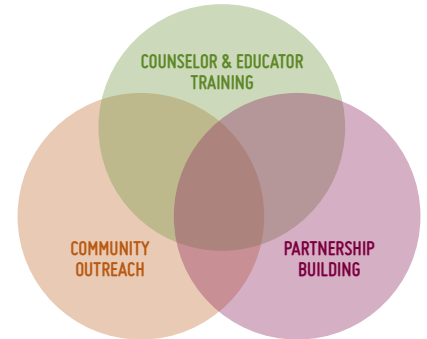
29%

of West Virginians have earned an associate degree or higher.¹

49%

of jobs in West Virginia will require postsecondary education by 2018.²

SERVICES & OBJECTIVES:



15 to FINISH

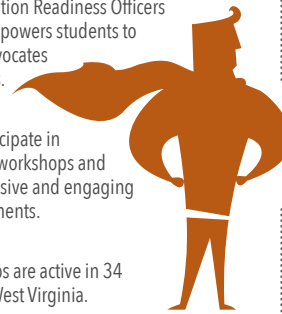
WEST VIRGINIA

Through its CFWW initiative, the Higher Education Policy Commission launched "15 to Finish," a system-wide effort to support on-time graduation and timely degree completion. 15 to Finish is a call to action encouraging students to take a full course load every semester. All public four-year colleges are supporting the awareness campaign. **Since the effort began, the number of first-time freshmen taking 15 credit hours or more has increased by seven percentage points.**

CFWW's Higher Education Readiness Officers (HEROs) program empowers students to be postsecondary advocates in their communities.

HEROs students participate in intensive leadership workshops and learn to support inclusive and engaging educational environments.

HEROs student groups are active in 34 high schools across West Virginia.



★ ★ ★ ★ ★ CHALLENGE — ACCEPTED —

In 2015, CFWW issued the "5 Star Challenge," a call to action to colleges to adopt a set of exemplary standards for serving student veterans. All public colleges and universities in WV have since implemented the program.

Hi! It's Jess w/ CFWW. Did u know WV 4-year colleges require either the ACT or SAT? Need to take the ACT? Reg. by Jan 9 for the Feb test - <http://bit.ly/1o49xmn>

CFWW system

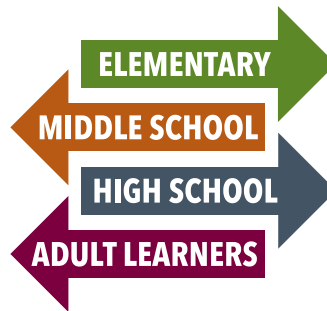
Do you have to take it for 2 year colleges?

Student

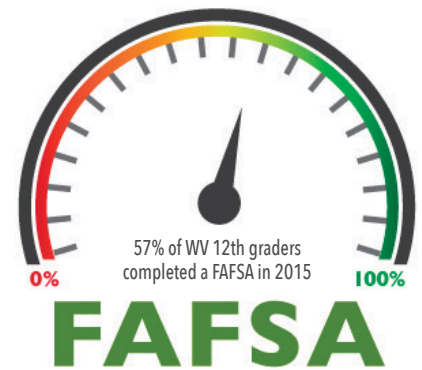
No - it's not required for admission. But did you know you can use the PROMISE scholarship at 2 year colleges? You might want to take it to try to qualify for that. CFWW.com offers free test prep!

Counselor, J.Kennedy

In 2014, CFWW began providing high school seniors and college freshmen with college counseling by text message. Since then, counselors have fielded more than 34,000 text inquiries from students. **Early results indicate participating students complete more credit hours and earn higher college GPAs.**



In July, CFWW hosted its sixth annual Student Success Summit. More than 400 educators and stakeholders from across the Pre-K through higher education continuum participated – ranging from pre-school teachers to college presidents, from students to counselors and principals, and from non-profit directors to private industry leaders.⁴



As of 2016, WV ranks **fourth in the nation** in FAFSA completion, jumping from 10th place in 2015. So far this year, staff from the Commission have coordinated and scheduled more than 200 financial aid workshops.⁵

#CollegeBound

In 2016, CFWW celebrated its seventh annual College Application and Exploration Week, a public awareness initiative to help students plan for postsecondary education and submit college applications. More than 450 schools across the state, from pre-schools to adult learning centers, participated in the initiative. Governor Tomblin also recognized the week through a proclamation.³

A central component of the CFWW initiative is WV's one-stop college access web portal, CFWW.com. In 2016, more than 323,000 individuals⁶ have visited CFWW.com so far, which features information about colleges, scholarships, and more.

VISITORS: 323,000

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1. United States Census

2. Georgetown University, Center on Education and the Workforce (2010)

3. WVHEPC, College Application and Exploration Week Participation Data (2016)

4. WVHEPC, Student Success Summit attendance records (2016)

5. WVHEPC and U.S. Department of Education, FAFSA Completion Data (2015)

6. Google Analytics, College Foundation of West Virginia (2016)

WEST VIRGINIA GEAR UP

ADMINISTERED BY THE WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

West Virginia GEAR UP is a federal grant program aimed at assisting students in "Gaining Early Awareness and Readiness for Undergraduate Programs."

The Commission's first GEAR UP project launched in 2008 and continued through the 2014-15 academic year.

The Commission received its second GEAR UP grant in fall 2014. This new project will serve upwards of 13,000 students and will continue through 2021.



TARGET AUDIENCES:

- First-generation students
- Low-income students
- Parents of these students
- Educators, counselors, administrators, and community leaders working with these students

COUNTIES SERVED:

The Commission's current GEAR UP project (2014-21) provides services in **Boone, Fayette, Mason, Mercer, Mingo, Nicholas, Summers, Webster, Wirt, and Wyoming** counties.

JOB SITE VISITS



Nearly 2,500 students have participated in job site visits through the WV GEAR UP program.³



FINANCIAL AID

Since 2012, GEAR UP schools have made major gains in increasing the number of students applying for financial aid. FAFSA completion rates among GEAR UP 12th graders jumped eight percentage points – from 50% to 58%.⁵

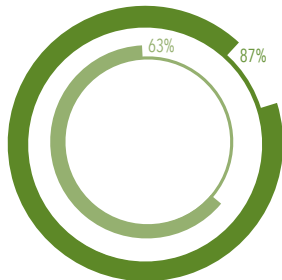
KNOWLEDGE & SUPPORT

95%

Ninety-five percent of GEAR UP students reported having spoken with someone regarding college admissions requirements, compared to only 77 percent of non-GEAR UP students attending comparable WV high schools.

And 70 percent of GEAR UP students reported receiving direct help from a college representative, while fewer than half of non-GEAR UP students said they had received help.¹

ASPIRATIONS



When the GEAR UP program first started in 2008, only 63% of parents of students in the class of 2014 expected their child to earn a two-year degree or higher. By the time those students graduated high school, 87% of those same parents said they expect their child to earn a degree.¹

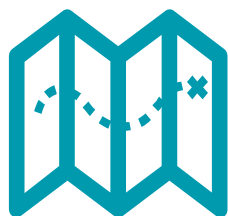


The college-going rate in WV GEAR UP schools increased by 3.7% over the course of the Commission's first GEAR UP project – in spite of slight decreases in the statewide rate during the same time period.⁶



APPLICATIONS

A recent survey showed that more than 81 percent of GEAR UP students applied to at least one college or university, while only 71 percent of students from comparable WV high schools completed at least one college application.²



COLLEGE VISITS

10,000

Since WV GEAR UP began in 2008, the program has helped more than 10,000 students visit a college by coordinating free campus tours.³

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1. West Virginia Higher Education Policy Commission, GEAR UP Annual Survey (2014)
2. West Virginia Higher Education Policy Commission, Senior Opinion Survey (2014)

3. West Virginia Higher Education Policy Commission, GEAR UP Participation Data (2016)
4. West Virginia Higher Education Policy Commission, GEAR UP Annual Survey (2014)

5. West Virginia Higher Education Policy Commission, FAFSA Completion Data (2012-2016)
6. West Virginia Higher Education Policy Commission, College-Going Rate Data (2012-2016)

Ikcie's College Dream

How grit, determination, and community support helped one West Virginia student in a dying town that is struggling to come to terms with a coal bust and opioid addiction

By Julia Schmalz
January 12, 2017

The empty coal train creaking its way through Madison, W.Va., captured the attention of residents on the streets of the once-prosperous community. Located in Boone County, the heart of coal country, townspeople hoped it was a sign that a coal mine was reopening — somewhere.

Devastated by the opioid epidemic and loss of good-paying jobs, Madison once supported three department stores. But that was a while ago. Now it is a shell of its former self.

Since then, it has struggled like many communities that have lost their economic base. Various federal aid programs have made funds available to rebuild devastated counties like it. Boone is one of 10 counties in the state that qualified for federal grant money through the Gaining Early Awareness and Readiness for Undergraduate Programs, or Gear Up.

One of its beneficiaries is James (Ikcie) Brooks, 21. His parents are representative of the economic woes in Madison. His father died after years of substance abuse, and his mother suffered for many years from drug addiction.

Ikie is a frontline witness to the region's decline in good-paying jobs and rise in opioid addiction. He was part of the first Gear Up cohort there and blossomed into one of its student leaders. Ikie started the program as a seventh grader, in 2008. At the time, 68 percent of parents with students in his class thought that their child would earn a two-year degree or higher, according to the West Virginia Higher Education Policy Commission. When Ikie graduated from high school four years later, 87 percent of those same parents believed that their child would get a degree, an increase of about 20 percentage points, or one in five parents.

In addition, Gear Up schools raised their students' college-going rate by 3.7 percentage points while West Virginia as a whole saw slight decreases.

We caught up with Ikie, now a junior studying political science at Marshall University, in Huntington, W.Va., when he was home for winter break. This is not a red- or a blue-state story, but a story of grit, perseverance, community, and hope.

Julia Schmalz is a senior multimedia producer. She tells stories with photos, audio, and video. Follow her on Twitter [@jschmalz09](https://twitter.com/jschmalz09), or email her at julia.schmalz@chronicle.com.

This story is accompanied by a video, which can be found on the Commission's website.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM:	Presentation of 2016 Higher Education Report Card
INSTITUTIONS:	All
RECOMMENDED RESOLUTION:	Information Item
STAFF MEMBER:	Chris Davies

BACKGROUND:

The 2016 Higher Education Report Card is representative of the 2015-16 academic year. Commission members will receive a presentation on the report, which can be accessed at the following link:

<http://www.wvhepc.edu/wp-content/uploads/2017/01/2016-Report-Card.pdf>

West Virginia higher education institutions followed the recent national trend experiencing enrollment growth during the economic recession beginning in 2008 peaking in 2011 and slowly declining as the economy recovered. Tuition and fees steadily increased over the same period, also following the same trend nationally albeit less dramatically than in many other states. The Commission's efforts to increase degree production are showing positive results with growth in numbers of STEM degrees and unprecedented total annual degrees awarded.

Pursuant to West Virginia Code §18B-1B-8, the 2016 West Virginia Higher Education Report Card was submitted to the Legislative Oversight Commission on Education Accountability on January 6, 2017.

Highlights:

Undergraduate Enrollment

- Students enrolled in for-credit classes decreased 0.8 percent, from 53,323 in 2014 to 52,889 in 2015.
- For-credit enrollment decreased by 3,719 students since 2011, representing a 6.6 percent decrease.
- In 2015, 53.1 percent of first-time freshmen took at least 30 hours within their first year of enrollment. This represents a 3.1 percentage point increase from 2015 (50.0 percent) and a 7.2 percentage point increase from 2011 (45.9 percent).

Graduate Enrollment

- Graduate students enrolled in for-credit classes decreased 0.3 percent, from 12,433 in 2014 to 12,397 in 2015.
- For-credit enrollment declined by 593 students since 2011, representing a 4.6 percent decrease.

Average Undergraduate Tuition & Fees for In-State and Out-of-State Students

- Average undergraduate tuition for in-state students increased 5.7 percent, from \$6,211 in 2014 to \$6,568 in 2015.
- The five-year trend in tuition and fees shows an increase of 27.6 percent for in-state students and 20.1 percent for out-of-state students.

One-Year Retention Rates

- First-time, full-time retention rates have increased one percentage point at four-year public institutions increasing from 74.7 percent in 2014 to 75.7 percent in 2015.
- From 2013 to 2014, part-time, first-time freshmen (45.4 percent) saw the largest one-year increase at 5.6 percentage points, followed by undergraduate adult students (56.8 percent) at 4.1 percentage points, transfer students (73.6 percent) at 0.8 percentage points, and low-income students (67.6 percent) at 0.5 percentage points.

Graduation Rates for Students Seeking a Bachelor's Degree

- Four-year graduation rates have increased 1.3 percentage points from 26.1 percent for the 2011 cohort to 27.4 percent for the 2012 cohort. This represents a 5.4 percentage point increase from the 22.0 percent reported for the 2008 cohort.
- Six-year graduation rates increased 1.4 percentage points at four-year public institutions from 46.8 percent for the 2009 cohort to 48.2 percent for the 2010 cohort.

Degrees/Credentials Awarded by Level

- The total number of degrees and credentials awarded at West Virginia colleges and universities in academic year 2015-16 was 13,763, which was 1.1 percent higher than the 2014-15 figure of 13,613.
- Over the five-year time period, the number of degrees and credentials has increased by 5.8 percent from the 2011-12 level of 13,008.
- The largest one-year increase in the number of awards was in bachelor's degrees with a growth of 389 which occurred between 2012-13 and 2013-14.

Number of Degrees, by level, in Health, STEM, and STEM Education

- The total number of health degrees has increased 4.9 percent from 2,097 in 2014 to 2,199 in 2015. The largest one-year increase was for doctor's – professional practice which increased 14.4 percent from 585 to 669. Health degrees have increased 20.8 percent from the 2011 figure of 1,820.
- The total number of STEM degrees has increased 4.8 percent from 3,315 in 2014 to 3,475 in 2015. The largest one-year increase was for doctor's – research/scholarship degrees which increased 17.5 percent from 103 to 121.
- Over the last five years, STEM degrees have increased 10.7 percent from the 2011 figure of 3,138.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Presentation of 2016 Health Sciences and Rural Health Report Card

INSTITUTIONS: Marshall University, West Virginia School of Osteopathic Medicine, and West Virginia University

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Robert Walker

BACKGROUND:

Pursuant to West Virginia Code §18B-16-9(c), the *2016 Health Sciences and Rural Health Report Card* was presented to the Legislative Oversight Commission on Education Accountability on January 10, 2017.

The *2016 West Virginia Health Sciences and Rural Health Report Card* includes admissions data, licensure exam data, and student debt data from the state's three medical schools; graduation data from other health professions programs; Health Sciences Service Program and Medical Student Loan Program data; and, Rural Health Initiative program profiles.

The full report is available at the following link:

<http://www.wvhepc.edu/wp-content/uploads/2017/01/2016-Health-Sciences-and-Rural-Health-Report-Card.pdf>

Highlights

- The state's three medical schools collectively enrolled 402 students in their first year classes. One hundred and sixty-eight of these 402 students were in-state students.
- In-state tuition at West Virginia medical schools is among the most affordable in the nation, with all three medical schools setting in-state tuition at under \$30,000 per year.

- All three medical schools had licensure exam (COMLEX Level 3 or USMLE Step 3) passage rates for first-time test takers well above 90 percent.
- All three medical schools achieved good results with their 2016 graduates selecting primary care residencies. The national average was 48 percent of medical school graduates selected primary care residencies. In West Virginia, 47 percent of graduates at Marshall University, 48 percent of graduates at West Virginia University, and 61 percent of graduates at the West Virginia School of Osteopathic Medicine selected primary care residencies.
- For the graduating classes of 2006 through 2011, 35 percent of West Virginia medical school graduates with completed training were retained for practice in West Virginia; 21 percent were retained for practice in primary care in West Virginia; and, 10 percent were retained for practice in rural areas in West Virginia.
- Historically, this report has focused primarily on the state's three medical schools. This year, the report contains graduation data for other health professions programs around the state including: dental hygiene, dentistry, nurse practitioner, pharmacy, physical therapy, and physician assistant program.
- Finally, the report includes an overview of the Rural Health Initiative. The Commission makes grants to the state's three academic health centers who design programming aimed at increasing the recruitment of healthcare providers to rural areas, increasing the retention rate of healthcare providers in rural areas, developing pipeline programs to enhance student interest in healthcare careers and supporting the involvement of rural areas of the state in the health education process.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Approval of 2016 Institutional Compact Updates

INSTITUTIONS: All

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the 2016 institutional Compact updates.

STAFF MEMBER: Chris Treadway

BACKGROUND:

Consistent with Series 49, Legislative Rule, Accountability System, the 2016 institutional Compact updates were reviewed by a diverse team of academic professionals and are now brought before the Commission for approval. This Compact update submission was the third cycle of Leading the Way: Access. Success. Impact. and focused primarily on the outcomes of Compact initiatives and institutional efforts to assess those outcomes. During the initial review in 2014, the review team concentrated its efforts on guiding campuses through the process of developing effective Compact strategies and establishing realistic, yet aspirational targets related to a number of key quantitative metrics. In the second year, the team evaluated each campus’s implementation efforts. This year, the review shifted again as the team focused on outcomes, or the effects of campus Compact initiatives on the quantitative measures outlined in the system Master Plan.

The pages that follow provide an executive summary of the review team’s assessment of each institution’s Compact update. Following a detailed examination of the update documents and the supplemental documents submitted by the institutions, the review team recommends approval of all 2016 Compact updates.

Institution	Recommended Action
Bluefield State College	Approve
Concord University	Approve
Fairmont State University	Approve*
Glenville State College	Approve*
Marshall University	Approve
Potomac State College of WVU	Approve
Shepherd University	Approve
West Liberty University	Approve
West Virginia State University	Approve*
West Virginia University	Approve
West Virginia University Institute of Technology	Approve

*A recommendation for approval of these updates is contingent upon the receipt of satisfactory institutional responses to the concerns and requests noted on individual institutional reports. Three institutions were working to finalize their responses at the time agenda items were submitted.

Bluefield State College

Report of the Review Team
on the 2016 Compact Update

January 2017



West Virginia
Higher Education
Policy Commission

HIGHLIGHTS

- The review team noted that the institution has made progress in implementing activities through its Academic Quality Comprehensive Plan that should lead to improved student success and better retention and graduation rates.
- As with all HEPC institutions, Bluefield State College is working to enhance employment opportunities for its graduates. A comprehensive Career Pathways approach is in place to prepare graduates for productive roles in the economy. A traditional set of program activities and events are in place and include partnerships with local and regional entities. The plan also includes excellent use of Alumni as a means of connecting pending and recent graduates with job opportunities.
- Despite declining fall headcount enrollments, the institution has increased degrees awarded at both the associate's degree and bachelor's degree level. The institution is having success with their K-12 outreach, especially the 'HSTA Science Symposium', which received high praise through a participant survey.
- The institution is progressing with its developmental education goals and has exceeded Compact goals for pass rates.
- Bluefield State College realized a significant increase in Fall First-Time Freshmen Headcount Enrollment, which grew from 239 to 273 students between 2014-15 and 2015-16.
- The institution provided information on student loan repayment to 600 students and has been working with Inceptia to reduce its student loan default rate. As a result of these efforts, Bluefield State College's student loan default rate decreased from 26.8 percent in 2011 to 19.5 percent in 2013.

CONCERNS/RECOMMENDATIONS

- Related to developmental education, the institution is still offering zero-numbered, non-credit-based courses, but is moving toward implementation of Series 21.
- Bluefield State College continues to face significant challenges related to a depressed economy, a declining population, and increased competition in Southern West Virginia. Fall Headcount Enrollment reached a five-year low of 1,482 students, down from 2,051 in 2011-12. With five straight years of declines across nearly all enrollment metrics, the review team is concerned that Bluefield State College is unlikely to meet its aspirational 2018 enrollment targets. Further, both of the institution's Enrollment activities are dependent on the construction of on-campus housing, a process that is unlikely to be completed prior to the end of the current Compact cycle. With this in mind, the review team requests that the institution modify its enrollment strategy to include new activities that are more likely to have a measurable impact on enrollment during the current Compact cycle.
- In spite of its efforts to encourage faculty to engage in scholarly research, activity remains low. Understanding the difficulty of conducting comprehensive research with heavy course loads and budget constraints, the institution should continue its efforts to encourage faculty to produce more research and present at regional and state conferences.

- The institution's original goal of decreasing the credit load of BSCS 100 failed to pass the faculty senate, however, they are working with faculty to achieve this goal. The graduate seminars are helpful to students and a great resource, however, they are targeted at students who are already graduating which does not necessarily increase the institution's four- or six-year graduation rates.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 Bluefield State College Compact update** with the stipulation that the institution must propose and implement activities to replace those reported as being directly dependent on the construction of residence halls. Implementation of alternate activities must be completed prior to the end of the current reporting cycle.

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Bluefield State College		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	1,482	1,761	2,154
Annualized FTE	59,457	68,000	1,296	1,547	1,879
Fall First-Time Freshmen Headcount	10,864	12,750	273	281	322
Fall Low-Income Student Headcount	18,122	22,000	862	1,015	1,200
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	172	207	255
Fall Adult (25+) Headcount	4,307	11,500	545	729	972
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	73.9%	**	70.0%
English	76.7%	75%	72.3%	**	80.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	67.9%	**	40.0%
English	71.2%	70%	60.7%	**	55.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	62.7%	**	67.0%
Part-time, First-Time Freshmen	45.4%	50%	50.0%	**	50.0%
Low-Income First-Time Freshmen	67.6%	75%	60.7%	**	65.0%
Returning Adults	55.1%	65%	53.2%	**	62.0%
Transfer Students	72.8%	76%	69.9%	**	75.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	58.6%	**	55.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	31.0%	**	30.0%
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014
First-Time Freshmen	27.3%	30%	13.7%	**	15.0%
Low-Income First-Time Freshmen	19.6%	20%	8.4%	**	15.0%
Returning Adults	38.1%	48%	31.3%	**	40.0%
Transfer Students	44.9%	48%	34.3%	**	40.0%
Underrepresented Racial/Ethnic Group Total	16.0%	20%	5.6%	**	15.0%
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012
First-Time Freshmen	47.2%	60%	23.4%	**	35.0%
Low-Income First-Time Freshmen	37.6%	40%	21.9%	**	25.0%
Returning Adults	42.4%	58%	31.5%	**	45.0%
Transfer Students	52.4%	58%	54.1%	**	55.0%
Underrepresented Racial/Ethnic Group Total	33.0%	40%	17.4%	**	20.0%
Impact					
Degrees Awarded	13,741	15,500	339	326.4	355
STEM Degrees	3,475	3,750	83	78.2	91
STEM Education Degrees	138	**	14	9.2	10
Health Degrees	2,012	2,000	141	111.6	115

Concord University

Report of the Review Team
on the 2016 Compact Update

January 2017



West Virginia
Higher Education
Policy Commission

HIGHLIGHTS

- The institution continues to work on curriculum mapping within the general studies program. The Assessment Committee has developed a learning outcomes rubric for use in evaluating assessments developed in general education courses. Modifications to the rubrics were made following testing in the Humanities Division. For most learning outcomes, over 90 percent of students scored satisfactory or above. In the two outcomes with lower success rates, course changes are being considered.
- Concord University's Career Pathways Comprehensive Plan features a highly appropriate blend of traditional career pathways strategies with an expanded use of technology, including social media.
- The institution has increased its outreach and access efforts. The number of applications for admission significantly increased during the reporting period.
- As the only Bonner Institution in West Virginia, it is noteworthy to recognize that through baseline data collection with the National Assessment of Service and Community Engagement, 64 percent of students are engaged in service of some kind, with 43 percent engaged through co-curricular experiences and 29 percent through curricular experiences. It is also noteworthy that the collection of hours is being tabulated (14,346 service hours + 8,042 service hours over the summer) through Bonner.
- The institution continues to see increases in the number of degrees awarded despite reaching its 2018 Compact goal in 2013. Its plans on retention, progress to degree, and graduation rates are tied to its Degrees Awarded activities. Additionally, the institution continues to effectively utilize DegreeWorks, has revised its student orientation program, and continues to use 'intrusive advising'.
- Concord is making a determined effort to adopt a full co-requisite model for developmental education by moving to full implementation in English and progressing with the implementation in math.
- Concord University realized a slight increase in fall first-time freshmen headcount enrollment, which grew from 422 in 2014-15 to 456 in 2015-16. The institution's Office of Admissions has successfully implemented its Customer Relationship Management (CRM) communication plan, an initiative aimed at leveraging social media and e-mail resources to encourage prospective students to apply for admission. Additionally, Concord's efforts to recruit international students has experienced enrollment growth in both the African and European markets. Concord has also extended its reach in southern West Virginia by offering 179 courses, with a total seat count of 2,621 students, at the Erma C. Byrd Higher Education Center.
- Concord University is to be commended for making efforts to continue funding for faculty travel and research and supplementing for state reductions.
- The institution is collaborating across campus to encourage FAFSA filing and using community resources to conduct debt education. Additionally, Concord University is utilizing resources provided by the Commission.

- Concord has one of the stronger approaches toward student retention through the implementation of a campus-wide retention team, the restructuring of its University 100 course, and creating default student degree pathways as students enter the institution.
- Graduate faculty continue to receive training in Quality Matters. Eighteen full and part-time graduate faculty have received the training. A review of graduate online courses will begin in 2016-17. All graduate programs require a capstone course that has an experiential learning experience.
- Most four-year graduation rates are increasing, particularly low-income which increased 4 percent from 2011 to 2012. The institution has increased the number of new student orientations and a corresponding increase in students taking 15 hours a semester as a result of identifying a field of study.
- Concord University has fully-implemented the 15-to-Finish initiative with extremely encouraging results. The institution's efforts may be worthy of sharing across the system.
- The review team was impressed with Concord University's efforts to conduct a procedural audit to determine what policies may be causing 4-year graduation pathway roadblocks for students. The institution is working to eliminate and amend such policies.

CONCERNS/RECOMMENDATIONS

- Concord University is operating in a challenging environment with a depressed regional economy, declining population, and increased competition. With five years of successive enrollment declines, the institution will likely have difficulty reaching its 2017-18 targets across most enrollment measures. Two-year gains of more than 20 percent in both Fall Headcount and Annualized FTE Enrollment would be required in order for the institution to meet its targets.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 Concord University Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Concord University		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	2,517	2,755	3,100
Annualized FTE	59,457	68,000	2,333	2,591	2,800
Fall First-Time Freshmen Headcount	10,864	12,750	456	509	626
Fall Low-Income Student Headcount	18,122	22,000	1,122	1,220	1,219
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	220	210	187
Fall Adult (25+) Headcount	4,307	11,500	364	449	537
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	75.1%	**	70.0%
English	76.7%	75%	55.9%	**	70.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	27.2%	**	40.0%
English	71.2%	70%	52.9%	**	60.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	71.8%	**	75.0%
Part-time, First-Time Freshmen	45.4%	50%	66.7%	**	75.0%
Low-Income First-Time Freshmen	67.6%	75%	70.1%	**	70.0%
Returning Adults	55.1%	65%	61.5%	**	70.0%
Transfer Students	72.8%	76%	69.0%	**	75.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	58.1%	**	70.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	48.6%	**	45.0%
Four-Year Graduation Rate	<i>Cohort Years:</i>	2012	2012		2014
First-Time Freshmen		27.3%	30%	19.0%	** 25.0%
Low-Income First-Time Freshmen		19.6%	20%	16.2%	** 20.0%
Returning Adults		38.1%	48%	42.7%	** 40.0%
Transfer Students		44.9%	48%	37.8%	** 40.0%
Underrepresented Racial/Ethnic Group Total		16.0%	20%	11.1%	** 20.0%
Six-Year Graduation Rate	<i>Cohort Years:</i>	2010	2010		2012
First-Time Freshmen		47.2%	60%	35.5%	** 50.0%
Low-Income First-Time Freshmen		37.6%	40%	28.3%	** 40.0%
Returning Adults		42.4%	58%	52.9%	** 50.0%
Transfer Students		52.4%	58%	46.8%	** 50.0%
Underrepresented Racial/Ethnic Group Total		33.0%	40%	15.1%	** 40.0%
Impact					
Degrees Awarded	13,741	15,500	538	493.2	475
STEM Degrees	3,475	3,750	94	79	72
STEM Education Degrees	138	**	6	6.66667	5
Health Degrees	2,012	2,000	21	14.8	10

Fairmont State University

Report of the Review Team
on the 2016 Compact Update

January 2017



West Virginia
Higher Education
Policy Commission

HIGHLIGHTS

- Assessment has been identified as the primary initiative to enhance academic quality. A standardized rubric has been developed for use by peer reviewers when evaluating program assessment efforts. A schedule has also been developed for assessing general studies outcomes following the revision of student learning outcomes. At the recommendation of HLC, a more formalized assessment structure has been formed - the Institutional Assessment Council.
- As a notable success Fairmont State University's Career Pathways Plan include strong linkages with institutional academic offerings.
- The review team was pleased to see that FSU is working to assess and evaluate learning and services provided by its non-academic units.
- Fairmont has been a leader in the state with co-requisite implementation in both math and English. The institution has exceeded pass-rate goals.
- Fairmont State University realized slight increases in Fall Headcount and Annualized FTE enrollment. Additionally, underrepresented racial and ethnic minority enrollment has remained above the 2018 target for four consecutive years.
- In an effort to recruit more PROMISE recipients, FSU established a new scholarship program during the 2013-14 academic year. The PROMISE Beyond scholarship provides PROMISE recipients with an additional \$2,200 in aid to fill the gap between the PROMISE award amount and the total cost of tuition. Additionally, the institution adopted an appreciative advising model, which continues to evolve as institutional and student needs are assessed.
- Fairmont State University's Financial Aid Comprehensive Plan promotes collaboration across campus and with high schools to support an efficient and comprehensive approach to awarding financial aid. The institution packages all aid up front, enabling students to make more informed choices. This will not only have a positive impact on loan indebtedness but also on recruitment and retention.
- The university is continuing to implement a grant-funded program through the United States Department of Education which has had success at increasing the number of students completing traditionally difficult courses. It has also increased the graduation rates among students taking those courses.

CONCERNS/RECOMMENDATIONS

- The review team is concerned about declining headcount enrollment since 2011-2012. Additionally, the number of low-income students enrolling has decreased. The review team did not see significant progress in this Compact report compared to last year's report. The internal collaboration is admirable, however, at this stage in the compact, the institution should be collaborating with external partners (i.e., K-12) to increase access.
- Fairmont State University's Fall Low-Income Headcount declined by 118 students. Fall Adult (25+) Headcount enrollment has declined in each of the past five years, from a high of 1,330 in 2011-12 to a low of 873 in 2015-16. However, this decline may simply be an unavoidable correction following the enrollment gains attributed to the 2009 recession.

- The activities described in the Career Pathways Comprehensive Plan are linked to only two academic offerings and are not being implemented university-wide. The update document does not describe efforts to collaborate with outside entities. Considerable time was devoted to describing the institution’s budgetary issues that have had a significant impact on the continued implementation of the plan. The review team requests that the institution respond to these concerns. If budgetary issues will interfere with the institution’s ability to implement the proposed activities, the review team recommends that alternate activities be developed and submitted for consideration.

RECOMMENDATION OF THE REVIEW TEAM

The review team will recommend **approval of the 2016 Fairmont State University Compact update**, pending the receipt of satisfactory responses to review team concerns and requests related to the Career Pathways Comprehensive Plan.

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Fairmont State University			
	2015	System Goal	2015	Five Year Average	2018 Target	
Access						
Fall Head Count	64,548	73,500	4,025	4,267	4,757	
Annualized FTE	59,457	68,000	3,606	3,840	4,272	
Fall First-Time Freshmen Headcount	10,864	12,750	822	750	774	
Fall Low-Income Student Headcount	18,122	22,000	1,625	1,859	2,175	
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	403	385	362	
Fall Adult (25+) Headcount	4,307	11,500	873	1,093	1,370	
Success						
Students Passing Developmental Courses	2014		2014			
Math	69.4%	70%	79.6%	**	70.0%	
English	76.7%	75%	88.5%	**	75.0%	
Developmental Students Passing College-Level Course	2014		2014			
Math	44.5%	60%	81.8%	**	45.0%	
English	71.2%	70%	83.6%	**	65.0%	
Retention	2014		2014			
Full-Time, First-Time Freshmen	74.9%	80%	72.8%	**	75.0%	
Part-time, First-Time Freshmen	45.4%	50%	55.6%	**	57.0%	
Low-Income First-Time Freshmen	67.6%	75%	65.7%	**	73.0%	
Returning Adults	55.1%	65%	64.6%	**	60.0%	
Transfer Students	72.8%	76%	72.3%	**	80.0%	
Underrepresented Racial/Ethnic Group Total	63.3%	75%	55.1%	**	66.0%	
Progress Toward Degree						
First-Time Freshmen Earning 30 Hours	50.0%	65%	35.6%	**	40.0%	
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014	
First-Time Freshmen	27.3%	30%	18.7%	**	18.0%	
Low-Income First-Time Freshmen	19.6%	20%	11.8%	**	15.0%	
Returning Adults	38.1%	48%	33.3%	**	38.0%	
Transfer Students	44.9%	48%	40.8%	**	42.0%	
Underrepresented Racial/Ethnic Group Total	16.0%	20%	11.1%	**	15.0%	
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012	
First-Time Freshmen	47.2%	60%	33.1%	**	40.0%	
Low-Income First-Time Freshmen	37.6%	40%	25.4%	**	34.0%	
Returning Adults	42.4%	58%	41.4%	**	40.0%	
Transfer Students	52.4%	58%	49.1%	**	51.0%	
Underrepresented Racial/Ethnic Group Total	33.0%	40%	19.4%	**	25.0%	
Impact						
Degrees Awarded	13,741	15,500	827	813	828	
STEM Degrees	3,475	3,750	200	174.6	183	
STEM Education Degrees	138	**	10	9	5	
Health Degrees	2,012	2,000	148	147	140	

Glenville State College

Report of the Review Team
on the 2016 Compact Update

January 2017



HIGHLIGHTS

- The College has a major emphasis on identifying students in need of tutoring. The tutoring focus is supported by a myriad of resources including: 1) Academic Support Center, 2) Writing Lab, 3) Math Tutoring Center, 4) Student Support Services, 5) online tutoring (NetTutor), 6) College Completion Center, 7) Student Life, and 8) tutoring within the athletic and academic departments.
- In its Collaborative Access Comprehensive Plan, the institution clearly outlines its access initiatives, including: Hidden Promise, ESI (Federal Pell pilot program with HS juniors and seniors), the JASON project, and efforts to reach adult learners.
- The number of degrees awarded has substantially increased since 2014-15 and now slightly exceeds the institution's formal 2018 goal. The institution attributes this increase to an increase in the number of non-traditional students completing programs of study.
- The institution has shown a commitment to implementing co-requisite math and English and has made some substantial curricular reforms.
- Although Glenville State College experienced slight declines across several enrollment metrics, overall Fall Headcount Enrollment and Annualized FTE Enrollment remained relatively stable, declining by only 11 and 25 students, respectively from the previous year. A 12.9 percent increase in Fall Underrepresented Racial and Ethnic Minority enrollment has placed the institution in a solid position to reach its 2018 target of 360 students, although comparable increases will be required in each of the next two years for that to occur. Glenville's Admissions Office is working to contact students who stopped-out prior to graduation within the past three years to collect information that will guide future initiatives to identify and offer assistance to students at risk of stopping out. No mention was made, however, of efforts to encourage the students they are contacting to reenroll.
- Several faculty members have received substantial grants, perhaps as a result of the grant writing workshops. Overall research activity remains low, however.
- Retention and graduation rates for students in the Hidden Promise Scholars program far exceed that of the rest of the student body and is exceptional considering its focus on low-income, first generation students. The Honors program scholarship has been successful in meeting the recruitment goals of the program. The institution is commended for providing financial assistance to low-income, first-generation, and minority students.
- Glenville has refocused its first-year experience courses around student degree objectives/major area, a unique approach which separates the institution from its in-state peers. Moving from a more centralized structure that focuses on general education curriculum has its advantages, however, there is no analysis from last year's implementation to show if the shift is having an impact.
- The institution is utilizing resources available through Inceptia and HEPC for default management services and financial literacy. The default rate has decreased significantly from 23.09% to 16.8%.

CONCERNS/RECOMMENDATIONS

- Related to developmental education, the institution continues to offer non-credit, zero-numbered courses, however, it has demonstrated a willingness to meet Series 21 goals.
- Increases of 8-10 percent in each of the next two years will be necessary if Glenville State College hopes to reach its 2018 target on Fall Headcount and Annualized FTE Enrollment. In its annual update, the institution expressed hope that future efforts to recruit and retain non-traditional students will boost its enrollment numbers. Regarding its strategy to expand the use of social media and its own radio and television programming capability to boost enrollment, the update does not present a clear picture of the extent to which these efforts have been successful or the methods that are in place to assess them.
- The creation of an early warning system is also critical to aiding retention efforts. The latest update reads as there is a general advising committee in place, which is staffed by all academic departments and monitors students' progress throughout the academic term(s). However, it seems the supplemental teams focused on developmental education students and student athletes have not been formed. The latter seems especially concerning, as the institution noted that the overall retention rate is being impacted by out-of-state student athletes. The review team requests additional information on the implementation status of the two supplemental early warning teams focused on developmental students and athletes. Additionally, the review team asks requests that the institution provide an update on the analysis of 2015-16 GSC 100 outcomes data.
- The institution is asked to provide written responses to the following questions related to the institution's Student Loan Default Rate Strategy: 1) Is most of the success with decreasing the student loan default rate attributable to the institution's work with Inceptia? 2) Can the success of the other activities be measured without waiting until the students who are impacted by these initiatives show up in the cohort default rate? 3) In addition to the default rate, what other metrics (i.e. average annual loan amounts, percentage of students borrowing, retention rates, academic success of students on SAP that are being advised, etc.) are being used to gauge the success of these activities?

RECOMMENDATION OF THE REVIEW TEAM

The review team will recommend **approval of the 2016 Glenville State College Compact update**, pending the receipt of satisfactory responses to review team concerns and requests related to early warning systems and the Student Loan Default Rate Strategy.

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Glenville State College		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	1,754	1,815	2,050
Annualized FTE	59,457	68,000	1,223	1,326	1,536
Fall First-Time Freshmen Headcount	10,864	12,750	336	349	425
Fall Low-Income Student Headcount	18,122	22,000	655	710	728
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	297	309	360
Fall Adult (25+) Headcount	4,307	11,500	412	536	540
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	56.5%	**	70.0%
English	76.7%	75%	68.9%	**	78.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	46.1%	**	29.0%
English	71.2%	70%	58.5%	**	55.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	66.9%	**	68.0%
Part-time, First-Time Freshmen	45.4%	50%	27.1%	**	57.0%
Low-Income First-Time Freshmen	67.6%	75%	64.2%	**	62.0%
Returning Adults	55.1%	65%	51.7%	**	56.0%
Transfer Students	72.8%	76%	54.1%	**	65.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	41.0%	**	53.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	30.8%	**	30.0%
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014
First-Time Freshmen	27.3%	30%	22.2%	**	23.0%
Low-Income First-Time Freshmen	19.6%	20%	14.3%	**	20.0%
Returning Adults	38.1%	48%	38.9%	**	34.0%
Transfer Students	44.9%	48%	35.3%	**	32.0%
Underrepresented Racial/Ethnic Group Total	16.0%	20%	2.9%	**	10.0%
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012
First-Time Freshmen	47.2%	60%	47.5%	**	35.0%
Low-Income First-Time Freshmen	37.6%	40%	41.3%	**	30.0%
Returning Adults	42.4%	58%	37.9%	**	42.0%
Transfer Students	52.4%	58%	39.2%	**	43.0%
Underrepresented Racial/Ethnic Group Total	33.0%	40%	25.0%	**	19.0%
Impact					
Degrees Awarded	13,741	15,500	247	214.6	235
STEM Degrees	3,475	3,750	33	38	47
STEM Education Degrees	138	**	0	1	5
Health Degrees	2,012	2,000	0	0	0

Marshall University

Report of the Review Team
on the 2016 Compact Update

January 2017



HIGHLIGHTS

- Marshall continues to fine tune and expand on its comprehensive assessment plan for general education and academic programs. The general education program identifies courses that are writing-intensive and emphasize critical thinking, multi-culturalism, and service learning. Faculty development is critical in the development and teaching of these courses. Comparisons between freshmen and seniors show significant improvement in all aspects of critical thinking, information literacy and communication fluency. Academic programs have revised learning outcomes to build on those in general education. Program assessment reports are reviewed by the Assessment committee and lead to recommendations for improvement. The University has found that student success is correlated to the existence of high impact practices. The University is in the process of analyzing the impact of these practices.
- Related to its Collaborative Access Comprehensive Plan, the institution clearly articulates access goals and outcomes that are relevant, attainable, and measurable. The review team was intrigued by the implementation of an intrusive mentoring/advising model, which is showing early signs of success. This initiative should be shared with other institutions across the system.
- The number of degrees awarded has consistently exceeded the institution's target in all but one of the previous five years. The institution's intrusive mentoring initiative is showing positive results. Marshall is also continuing its work with the "Murky Middle," or middle-ability first time freshmen, with promising results.
- Marshall has made substantive progress in delivery of developmental education including full co-requisite implementation in English. The institution was also among the first, if not first, in the state to offer a summer bridge program.
- Marshall University has taken a multilayered approach to addressing its post-recession enrollment challenges. The Compact update details a number of noteworthy initiatives. Among these is the use of intrusive advising strategies to identify and offer support services to low-ability students in specific majors. For example, 70 low-ability pre-nursing majors were moved from the College of Health Professions to University College where they were required to engage in consultations with advisors in the Office of Career Education. The institution also moved its mid-term grade reporting deadline two weeks earlier in the academic term to give students more time to withdraw from a course and enroll in another 8-week course the second half of the semester.
- Marshall is to be commended for its work in including research metrics into faculty evaluations. Despite budget cuts and heavy course loads, Marshall has demonstrated a commitment to faculty research and scholarship.
- The institution has revised its financial aid award letter to make it more appealing to students. The new design includes pictures, comprehensive information on financial aid, and a detailed cost analysis and is a more effective tool to help students make informed decisions. Marshall has also developed a comprehensive strategy for awarding institutional aid aimed at maximizing enrollment and tuition revenue.
- Marshall University has seen a decrease in default rate from 13.4% to 9.5%.
- Marshall's continued focus on middle ability students is an example that two- and four-year institutions should take notice of. Faculty and staff involved with the experimental advising group have assessed the first cohort and are making changes that should result in greater participation. As part of a holistic strategy that is anchored by the UNI 100 course, students are

delivered a customized schedule and instructed on the value of enrolling and completing 15 hours per semester. This also parallels Marshall's "15 to Finish" campaign. Throughout, aggregate and student-level data are being leveraged to not only identify at-risk student, but also track student outcomes and make appropriate changes where needed. Marshall's retention strategy is one of the best examples of an implemented, comprehensive approach to student first-year retention among all the institutional Compacts. The Commission should look for opportunities to continue to highlight Marshall's efforts in this area.

- The University is committed to increasing the number of graduate programs that can be completed using distance education technology. Thirty programs now meet that goal including eight that achieved this goal in the past year. A new model for faculty compensation has been devised to provide an incentive for online courses delivery. Compensation packages for graduate students were revised to limit waivers to those students engaged in activities that complement their graduate training. This has resulted in a reduction of the total number of graduate assistantships offered but provided for higher awards
- Collaboration with University of Kentucky and Murray State resulted in the award of an NSF RII Track 2 grant. The School of Medicine has committed \$300K of internal funds toward replicating the success of the UK-Marshall CTSA pilot program in increasing funded proposals by junior faculty. The School of Pharmacy has committed \$100,000 of internal funds. Altogether, research grants and contracts have increased from \$6.2M in FY2013 to \$11.8M in FY2015.

CONCERNS/RECOMMENDATIONS

- No serious concerns were noted.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 Marshall University Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Marshall University			
	2014	System Goal	2014	Five Year Average	2018 Target	
Access						
Fall Head Count	64,949	73,500	13,381	13,731	14,766	
Annualized FTE	60,236	68,000	11,866	12,019	12,500	
Fall First-Time Freshmen Headcount	10,836	12,750	1,861	1,919	2,100	
Fall Low-Income Student Headcount	20,102	22,000	3,997	4,099	4,000	
Fall Underrepresented Racial/Ethnic Group Total	6,977	6,700	1,294	1,138	1,005	
Fall Adult (25+) Headcount	8,268	11,500	1,610	1,911	2,100	
Success						
Students Passing Developmental Courses	2013		2013			
Math	69.5%	70%	68.3%	**	45.0%	
English	79.7%	75%	86.3%	**	50.0%	
Developmental Students Passing College-Level Course	2013		2013			
Math	37.4%	60%	53.6%	**	30.0%	
English	64.7%	70%	68.9%	**	40.0%	
Retention	2013		2013			
Full-Time, First-Time Freshmen	74.1%	80%	77.4%	**	70.0%	
Part-time, First-Time Freshmen	39.8%	50%	42.9%	**	50.0%	
Low-Income First-Time Freshmen	67.1%	75%	70.7%	**	70.0%	
Returning Adults	52.7%	65%	61.3%	**	25.0%	
Transfer Students	72.8%	76%	71.8%	**	72.0%	
Underrepresented Racial/Ethnic Group Total	63.8%	75%	73.4%	**	65.0%	
Progress Toward Degree						
First-Time Freshmen Earning 30 Hours	48.7%	65%	50.2%	**	55.0%	
Four-Year Graduation Rate	<i>Cohort Years:</i>		2011	2014	2011	2014
First-Time Freshmen	25.9%	30%	27.1%	**	25.0%	
Low-Income First-Time Freshmen	18.8%	20%	18.9%	**	15.0%	
Returning Adults	37.1%	48%	0.0%	**	35.0%	
Transfer Students	44.6%	48%	38.6%	**	36.0%	
Underrepresented Racial/Ethnic Group Total	15.0%	20%	22.9%	**	15.0%	
Six-Year Graduation Rate	<i>Cohort Years:</i>		2009	2012	2009	2012
First-Time Freshmen	46.0%	60%	45.6%	**	46.0%	
Low-Income First-Time Freshmen	35.1%	40%	33.8%	**	36.0%	
Returning Adults	41.2%	58%	50.0%	**	50.0%	
Transfer Students	51.0%	58%	46.3%	**	48.0%	
Underrepresented Racial/Ethnic Group Total	29.9%	40%	40.4%	**	39.0%	
Impact						
Degrees Awarded	13,611	15,500	2,622	2,577	2,575	
STEM Degrees	3,305	3,750	438	432	485	
STEM Education Degrees	121	**	12	21	30	
Health Degrees	1,334	2,000	593	503	635	

Potomac State College of WVU

Report of the Review Team
on the 2016 Compact Update

January 2017



HIGHLIGHTS

- Faculty participated in a series of assessment workshops that led to a revision of learning objectives for 25 courses and development of three new courses. There are plan to hire a Coordinator of Assessment and Accreditation who will be responsible for implementing ongoing systematic structures for measurement of institutional and unit-level effectiveness.
- Potomac State College of WVU has successfully revised and approved AAS/BAS requirements and reduced credit hour requirements to 60/120 hours. The institution has also completed creating three new programs aimed at increasing degree offerings and opportunities for reverse transfer.
- Potomac State College of WVU has experienced growth in first-time freshmen headcount enrollment as well as enrollment among black, non-hispanic students. Approximately 25 percent students enrolled in fall 2015 were identified as non-white. The institution attributes these positive trends to a number of activities, including work with Ruffalo Noel-Levitz, development of a comprehensive recruitment program, increasing communications efforts using traditional, digital and social media platforms, and purchasing a large number of search leads.
- Potomac State College of WVU is moving forward with curricular reform to implement co-requisite math.
- The institution has a goal of utilizing early FAFSA to award students as early as December to assist students making informed decisions. The institution is working to integrate its processes to provide consistency and efficiencies across campuses from the net price calculator to the awarding of institutional scholarships. The success of the scholarship awarding resulted in an 11% yield increase. The institution made changes to student employment which gives students a more real-life experience in applying and interviewing for a work-study position.
- Potomac State College of WVU has made significant strides in improving the quality of the institution's retention strategy. The authors point out that PSC is in a unique situation, as many students who enroll at PSC plan to transfer. While anecdotal in the past, this assertion has been confirmed through the delivery of CCSSE. The CCSSE continues to provide evidence for the need of additional personnel to improve the on-campus living experience and future staff to advise at-risk students. The implementation of corequisite remediation, along with math pathways, should also aid in student academic progress and retention to PSC or an affiliated institution.
- The institution has been more aggressive with identifying students who require reading developmental education and created a pilot program adding additional testing.

CONCERNS/RECOMMENDATIONS

- Potomac State College of WVU has experienced declines across most enrollment measures since the beginning of the current Compact cycle, with FTE and Headcount enrollment reaching a 5-year low in 2015-16. Most of these declines can be attributed to in-state students. Out-of-state student enrollment has remained relatively steady over the five-year period.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 Potomac State College of WVU Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Potomac State College of WVU		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	1,472	1,650	1,850
Annualized FTE	59,457	68,000	1,211	1,358	1,480
Fall First-Time Freshmen Headcount	10,864	12,750	588	661	780
Fall Low-Income Student Headcount	18,122	22,000	719	997	1,110
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	377	345	350
Fall Adult (25+) Headcount	4,307	11,500	137	223	285
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	63.5%	**	70.0%
English	76.7%	75%	76.1%	**	75.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	28.5%	**	40.0%
English	71.2%	70%	51.1%	**	60.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	51.8%	**	63.0%
Part-time, First-Time Freshmen	45.4%	50%	50.0%	**	58.0%
Low-Income First-Time Freshmen	67.6%	75%	44.4%	**	61.0%
Returning Adults	55.1%	65%	45.5%	**	55.0%
Transfer Students	72.8%	76%	37.5%	**	60.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	38.7%	**	57.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	23.7%	**	30.0%
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014
First-Time Freshmen	27.3%	30%	27.0%	**	29.0%
Low-Income First-Time Freshmen	19.6%	20%	19.6%	**	27.0%
Returning Adults	38.1%	48%	24.1%	**	45.0%
Transfer Students	44.9%	48%	33.3%	**	35.0%
Underrepresented Racial/Ethnic Group Total	16.0%	20%	13.4%	**	15.0%
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012
First-Time Freshmen	47.2%	60%	32.1%	**	40.0%
Low-Income First-Time Freshmen	37.6%	40%	27.1%	**	34.0%
Returning Adults	42.4%	58%	45.0%	**	39.0%
Transfer Students	52.4%	58%	37.7%	**	43.0%
Underrepresented Racial/Ethnic Group Total	33.0%	40%	12.2%	**	23.0%
Impact					
Degrees Awarded	13,741	15,500	253	261	325
STEM Degrees	3,475	3,750	40	46	60
STEM Education Degrees	138	**	0	1	0
Health Degrees	2,012	2,000	0	0	0

Shepherd University

Report of the Review Team
on the 2016 Compact Update

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West Virginia
Higher Education
Policy Commission

HIGHLIGHTS

- Student success is supported through an emphasis on student advising and tutoring. First-year, full-time faculty go through training to be "certified " to advise by the Center for Teaching and Learning. Students have indicated general satisfaction with tutoring support. A new Retention Intervention Team is charged with the implementation of retention strategies. There is evidence that academic departments have utilized assessment results for program improvements. The university has continued its emphasis on international and global learning. The university has developed an internal pathway for international student recruitment, support and programming highlighted by the following activities: 1) formation of a new advisory group for internationalization, 2) receipt of a \$50,000 grant to develop a full-time best practices study abroad office and 3) hiring of a full-time study abroad director.
- The institution is engaging in a number of notable efforts to improve access, including: 1) submitting an Upward Bound grant application, 2) enhancing outreach and services for student veterans, 3) expanding WV ROCKS, 4) adding additional areas of emphasis for its RBA degree, and 5) increasing outreach to transfer and international students.
- Despite delays in implementing DegreeWorks, the institution is continuing to resolve security issues with WVNET and hope to have the product launched by Spring 2017.
- Shepherd has been a leader in offering the stretch course model of developmental education and is planning a co-requisite pilot for the fall.
- Enrollment among African-American students has generally increased over the five-year period, reaching a 5-year high in 2015-16. The institution attributes this in part to its proximity to the Baltimore and Washington metropolitan areas, along with its targeted recruitment efforts in those areas. Enrollment in Shepherd's RBA program, which now features three areas of emphasis, has grown to 149 students. Shepherd is to be commended for its efforts to attract transfer students. The institution has developed a dedicated website with information for transfer students and has assigned admissions counselors to serve as institutional liaisons within local community colleges.
- Shepherd provides financial literacy through first year experience courses and offers counseling to students who are graduating. The institution continues to maintain a default rate that is below the state and national average.
- Shepherd continues to do an excellent job of tracking at-risk students through its academic support center and its TRIO program. The Beacon software continues to be implemented, with over 71 alerts over the 2015/16 academic year.
- The Accelerated MBA program recently began enrolling students. Currently, an accelerated pathway from the undergraduate major into the MAT program is in the process of curricular approval and is expected to be in place starting in spring or summer 2017. There are plans for a new program in the sciences - M.S. in Data Analytics and Information Sciences. A similar accelerated pathway would be explored. The University continues to explore international initiatives that will attract students into graduate programs.
- Most cohorts have seen an increase in four-year graduation rates. The institution required all departments to complete a gap analysis and create action plans for improvement. Some results include revising a competency program in the music department, adopting a standard assessment tool in the Chemistry department, and using pre- and post- tests to assess curricula and courses.

- Given that Shepherd is not required to provide a Research and Development Strategy, the institution has been fairly successful with obtaining grants (\$99.2K in FY2015). Faculty at Shepherd produced 87 peer-reviewed publications in FY2015 which indicates a commendable level of scholarly activity for an institution of its size.

CONCERNS/RECOMMENDATIONS

- The Higher Education Policy Commission provides funding to support engagement with a default prevention company, but the institution does not take advantage of this opportunity.
- The retention of out-of-state students seems to be a significant detractor from Shepherd reaching its retention goal. As part of next year's update, the review team would be interested to learn of any special efforts directed specifically toward this population.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 Shepherd University Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		Shepherd University			
	2015	System Goal	2015	Five Year Average	2018 Target	
Access						
Fall Head Count	64,548	73,500	3,956	4,237	4,696	
Annualized FTE	59,457	68,000	3,325	3,634	3,847	
Fall First-Time Freshmen Headcount	10,864	12,750	638	703	798	
Fall Low-Income Student Headcount	18,122	22,000	1,182	1,311	1,503	
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	531	488	487	
Fall Adult (25+) Headcount	4,307	11,500	893	1,034	1,188	
Success						
Students Passing Developmental Courses	2014	2014				
Math	69.4%	70%	0.0%	**	70.0%	
English	76.7%	75%	0.0%	**	NA	
Developmental Students Passing College-Level Course	2014	2014				
Math	44.5%	60%	0.0%	**	NA	
English	71.2%	70%	0.0%	**	NA	
Retention	2014	2014				
Full-Time, First-Time Freshmen	74.9%	80%	71.8%	**	77.0%	
Part-time, First-Time Freshmen	45.4%	50%	50.0%	**	65.6%	
Low-Income First-Time Freshmen	67.6%	75%	67.9%	**	70.0%	
Returning Adults	55.1%	65%	71.4%	**	72.0%	
Transfer Students	72.8%	76%	75.9%	**	74.0%	
Underrepresented Racial/Ethnic Group Total	63.3%	75%	60.0%	**	67.0%	
Progress Toward Degree						
First-Time Freshmen Earning 30 Hours	50.0%	65%	44.8%	**	44.0%	
Four-Year Graduation Rate	<i>Cohort Years:</i>	2012	2012		2014	
First-Time Freshmen		27.3%	30%	29.5%	**	26.7%
Low-Income First-Time Freshmen		19.6%	20%	22.5%	**	20.0%
Returning Adults		38.1%	48%	37.0%	**	43.0%
Transfer Students		44.9%	48%	47.0%	**	50.0%
Underrepresented Racial/Ethnic Group Total		16.0%	20%	14.0%	**	24.0%
Six-Year Graduation Rate	<i>Cohort Years:</i>	2010	2010		2012	
First-Time Freshmen		47.2%	60%	48.3%	**	45.0%
Low-Income First-Time Freshmen		37.6%	40%	39.6%	**	40.0%
Returning Adults		42.4%	58%	36.6%	**	65.0%
Transfer Students		52.4%	58%	56.0%	**	55.8%
Underrepresented Racial/Ethnic Group Total		33.0%	40%	31.7%	**	33.0%
Impact						
Degrees Awarded	13,741	15,500	785	797.2	792	
STEM Degrees	3,475	3,750	138	127.6	132	
STEM Education Degrees	138	**	4	5.5	10	
Health Degrees	2,012	2,000	80	68	65	

West Liberty University

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HIGHLIGHTS

- Assessment is a major focus of general studies and academic programs. The University has adopted LiveText as the tool for assessment report submissions and rubric scoring. Training has been provided to faculty. The General Studies Assessment Committee reviewed eight general education courses to determine how the courses address general studies goals and if the courses are using appropriate general studies student learning outcomes. The Assessment and Accreditation Committee assists programs that are preparing assessment updates as part of the five-year program review process. The Committee has greatly improved assessment sharing and communication among faculty and administration.
- The institution is engaging in a number of creative student access initiatives, including "High School Invasion." This pilot initiative with K-12 brings WLSU faculty into John Marshall High School to teach various lessons. Additionally, the institution is currently implementing a new CRM system, which should prove beneficial.
- West Liberty has met its formal Compact Goal by sustaining growth in the number of bachelor's degrees awarded. The university has had success with peer mentoring and has expanded the pilot to include biology and chemistry. Introducing new majors and publicizing student success has helped increase enrollment.
- West Liberty plans to continue to promote STEM and the success of its graduates. By requiring all students taking Biology 124 to participate in the Active Study section, the institution has eliminated initial implementation challenges. A 2015 assessment showed that students in the Active Study course outperformed other students despite differences in initial math ability.
- The institution's efforts to implement the co-requisite model of development education are showing early signs of success. West Liberty is fully committed to full implementation of co-requisite math and English.
- The institution has formed recruiting and retention teams in each of its academic colleges. As this is the first full year of implementation, the impact of this initiative on enrollment will not be realized until next year at the earliest. West Liberty is also actively working with to implement Radius, a customer relations management system.
- West Liberty's default rate has decreased from 18 percent to 10 percent.
- The institution is incorporating financial literacy and financial aid education into pre-enrollment activities and first year experience courses.
- The university continued efforts to create a graduate program culture and infrastructure. An Office of Graduate Studies was expected to be in place in fall 2016 with the responsibility of creating an overall graduate studies mission and vision statement. The Graduate Council revised policies that address faculty responsibilities for professional activity and service and online course obligations. A Graduate Student Association was formed. A Graduate Student handbook is scheduled to be available during the 2016-17 academic year. A procedure was developed to guide the appointment of graduate assistants.

CONCERNS/RECOMMENDATIONS

- West Liberty University has experienced declines across most enrollment measures. If the current trends continue, it is unlikely that the institution will meet its 2018 targets.
- Financial constraints forced the institution to significantly reduce its 2017 faculty development budget and discontinue offering course release time for faculty engaging in scholarly activity.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 West Liberty University Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		West Liberty University		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	2,347	2,663	2,820
Annualized FTE	59,457	68,000	2,258	2,558	2,652
Fall First-Time Freshmen Headcount	10,864	12,750	408	492	525
Fall Low-Income Student Headcount	18,122	22,000	837	1,036	1,170
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	131	147	160
Fall Adult (25+) Headcount	4,307	11,500	229	297	360
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	85.8%	**	70.0%
English	76.7%	75%	85.8%	**	85.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	47.2%	**	50.0%
English	71.2%	70%	90.7%	**	75.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	76.0%	**	79.0%
Part-time, First-Time Freshmen	45.4%	50%	50.0%	**	35.0%
Low-Income First-Time Freshmen	67.6%	75%	69.4%	**	73.0%
Returning Adults	55.1%	65%	43.5%	**	70.5%
Transfer Students	72.8%	76%	73.3%	**	78.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	51.5%	**	68.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	63.7%	**	63.0%
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014
First-Time Freshmen	27.3%	30%	30.3%	**	22.0%
Low-Income First-Time Freshmen	19.6%	20%	27.4%	**	15.0%
Returning Adults	38.1%	48%	69.0%	**	54.0%
Transfer Students	44.9%	48%	55.2%	**	45.0%
Underrepresented Racial/Ethnic Group Total	16.0%	20%	0.0%	**	12.0%
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012
First-Time Freshmen	47.2%	60%	44.4%	**	42.5%
Low-Income First-Time Freshmen	37.6%	40%	32.7%	**	35.0%
Returning Adults	42.4%	58%	58.8%	**	62.5%
Transfer Students	52.4%	58%	55.8%	**	54.0%
Underrepresented Racial/Ethnic Group Total	33.0%	40%	38.5%	**	24.0%
Impact					
Degrees Awarded	13,741	15,500	599	531.4	497
STEM Degrees	3,475	3,750	65	43	48
STEM Education Degrees	138	**	9	9	13
Health Degrees	2,012	2,000	123	106.6	123

West Virginia State University

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HIGHLIGHTS

- A new director of Institutional Research, Assessment and Effectiveness has been hired and is working with the Dean's Council to implement assessment guidelines and policies across the university. The General Education Assessment Subcommittee has begun to map outcomes to general education courses. This work is being complemented by plans for academic departments to map Institutional Learning Outcomes to program courses. There is evidence that department faculty are meeting to review assessment results and make program improvements. The Assessment Director meets regularly with the departments. Five-year assessment plans will be aligned with the five-year program review schedule.
- While the number of degrees awarded has decreased slightly, the institution remains on track to meet its formal 2018 target.
- The institution hired a Writing Center director and moved forward with implementation of English 101-E (with supplemental instruction).
- West Virginia State University has achieved respectable gains in Fall Headcount Enrollment, while Annualized FTE Enrollment remained relatively constant. This is due primarily a result of an increase in the dual-enrollment students.
- The institution has established new research expectations for faculty hired after 2015. Additionally, funding for research awards has increased.
- WVSU continues to make changes to its first-year experience course, which has been expanded to three credit hours and separates students by college and major. The review team looks forward to learning more in future updates about this initiative's effect on retention.
- WV State University's review and implementation of new degree maps is a critical piece to not only its retention efforts, but student academic success in general. The new maps will give students, staff, and faculty a common reference in advising discussions.
- The primary strategy for increasing opportunities for student engagement centers on research. The university utilizes the Promoting Excellence in Education through Research (PEER) program. Seventeen PEER Grants were awarded in 2016.
- The institution now requires all departments to report data on students' engagement with academic advisors, however, it has encountered difficulty obtaining statistics on the use of MyDegree@State by advisors and students. Anecdotal evidence suggests the number is rising, however.
- WV State University has been evaluating data on the number of students who complete financial aid exit counseling and is moving toward requiring exit counseling of all graduates. Additionally, the institution has engaged Edfinancial to assist with student loan default management. As a result of these efforts, WV State University's student loan default rate decreased from 16.6 percent to 15.4 percent.
- The review team commends WV State University for involving the Career Services office in the effort to lower the student loan default rate.

CONCERNS/RECOMMENDATIONS

- The institution has no current plan to implement the co-requisite model of developmental education despite its success at other institutions.
- Activities to support graduate student success are limited to increasing research opportunities. The institution did not provide information on the number of students impacted, nor was evidence provided to show that these efforts have enhanced student success.
- The review team requests that the institution provide written responses to the following questions and general concerns related to the institution's Financial Aid Comprehensive Plan: 1) What assessments and metrics are being used to determine if the activities in Strategy A are successfully enhancing the communication of financial aid information to students and faculty? 2) What assessments and metrics are being used to determine if the activities in Strategy B are affecting recruitment and retention efforts? 3) Activity 2 in Strategy C could be used to measure the success of communications in Strategy A, Activity 1, but the two do not seem to be tied together. 4) Activity 1 Strategy C might also be used to assess other activities, but it is not presented in that way.

RECOMMENDATION OF THE REVIEW TEAM

The review team will recommend **approval of the 2016 West Virginia State University Compact update** pending the receipt of satisfactory responses to review team concerns and requests related to the institution's Financial Aid Comprehensive Plan.

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		West Virginia State University		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	3,221	2,855	3,549
Annualized FTE	59,457	68,000	2,243	2,205	2,859
Fall First-Time Freshmen Headcount	10,864	12,750	374	363	500
Fall Low-Income Student Headcount	18,122	22,000	1,170	1,265	1,575
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	335	334	509
Fall Adult (25+) Headcount	4,307	11,500	749	870	1,150
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	55.3%	**	70.0%
English	76.7%	75%	71.9%	**	77.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	28.4%	**	40.0%
English	71.2%	70%	70.6%	**	62.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	65.0%	**	70.0%
Part-time, First-Time Freshmen	45.4%	50%	53.9%	**	60.0%
Low-Income First-Time Freshmen	67.6%	75%	57.8%	**	60.0%
Returning Adults	55.1%	65%	55.4%	**	65.0%
Transfer Students	72.8%	76%	69.1%	**	76.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	59.3%	**	60.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	27.8%	**	30.0%
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014
First-Time Freshmen	27.3%	30%	12.1%	**	14.0%
Low-Income First-Time Freshmen	19.6%	20%	10.2%	**	12.0%
Returning Adults	38.1%	48%	39.6%	**	40.0%
Transfer Students	44.9%	48%	46.4%	**	45.0%
Underrepresented Racial/Ethnic Group Total	16.0%	20%	5.9%	**	15.0%
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012
First-Time Freshmen	47.2%	60%	26.7%	**	30.0%
Low-Income First-Time Freshmen	37.6%	40%	20.9%	**	25.0%
Returning Adults	42.4%	58%	35.1%	**	45.0%
Transfer Students	52.4%	58%	43.9%	**	55.0%
Underrepresented Racial/Ethnic Group Total	33.0%	40%	21.1%	**	22.0%
Impact					
Degrees Awarded	13,741	15,500	438	430.2	449
STEM Degrees	3,475	3,750	54	53.8	66
STEM Education Degrees	138	**	6	9	15
Health Degrees	2,012	2,000	9	14.6	23

West Virginia University

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West Virginia
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Policy Commission

HIGHLIGHTS

- West Virginia University's Academic Advising Council revised its organizational structure to better support its missions, which include: 1) creating and conducting regular trainings on various topics identified as critical for retention and degree completion, and 2) identifying best practices and aggregating them into an undergraduate advising handbook. Improvement to the program review has been a focus.
- WVU has implemented an updated online community service management system that can be used by community partners to post critical needs and for students to track their curricular and co-curricular service
- Despite a small decline in the number of degrees awarded from 2014 to 2015, WVU is still within reach of its formal goal. The institution has made progress in reducing the number of credit hours required for graduation. Additionally, five new degrees have been added across the bachelor's, master's, and doctoral levels.
- While its enrollment reached a five-year low in 2015-16, West Virginia University has seen enrollment growth among underrepresented racial/ethnic groups in each of the five years of the current Compact cycle. In fact, enrollment within this target population has increased by nearly 23 percent in five years, placing the institution within sight of its 2017-18 target on this measure. WVU is addressing its enrollment challenges with a number of innovative initiatives, including implementation of a new communication strategy that promotes collaboration between the Office of Admissions and individual colleges to improve communications with prospective students. This effort, along with the institution's telecounseling initiative, contributed to a 30 percent increase in the number of applications received in the fall 2016 semester, along with even larger increases among target populations.
- WVU is integrating processes across divisional campuses to improve communication to students and create efficiencies through the net price calculator and changes to its award notification process. The institution is adapting its financial aid awarding processes to take advantage of early FAFSA to award aid earlier. The institution also implemented the AcademicWorks Scholarship Management system which has not only resulted in time savings for staff but, more importantly, allows the institution to better manage institutional funds and award students in a timely manner. It also improves the integrity of the awarding process by accurately matching scholarships to students based upon donor criteria.
- WVU made adjustments to its work study program to provide students with real- world experience in searching for jobs, submitting applications, and interviewing for positions.
- WVU continues to leverage the resources of a major research university to reach its Compact retention goal of 83 percent. Project 168 is focused on improving the curricular and co-curricular lives of students through employing DegreeWorks to develop shared academic plans and exposing students to positive experiences throughout the campus community. WVU has also partnered with EAB to develop the Student Success Collaborative, which is currently being implemented across the university. 2015 also saw the start of the First Year Pathway programs targeted at "at-risk" students.
- WVU has established a goal to implement four new or reconfigured master's programs per year and two PhD. programs by 2018. In the past two years 10 new graduate programs have been implemented. Recruiting efforts are designed to increase graduate applications to ensure high selectivity and sufficient enrollment. Some of the activities being utilized to increase applications

and admissions include: 1) a redesigned website, 2) a graduate fair for current WVU undergraduates, and 3) increased social media engagement. Many programs have added Areas of Emphasis to allow students to tailor their educational experiences to match their interests.

- In the 2015-2016 academic year, WVU was named a R1 – Highest Research Activity – institution by the Carnegie Foundation. WVU Faculty obtained \$128.5M in research grants and contracts in 2015. WVU reported that its faculty generated 1,444 peer-reviewed publications in 2015 compared to 1,888 in 2014. Additionally, an assessment of external grant writing workshops prompted the WVU Research Office to develop an internal grant writing program. WVU's LaunchLab has led to 11 student business starts and 55 provisional patents or trademarks.

CONCERNS/RECOMMENDATIONS

- No significant concerns were noted.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 West Virginia University Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		West Virginia University		
	2015	System Goal	2015	Five Year Average	2018 Target
Access					
Fall Head Count	64,548	73,500	28,883	29,558	36,000
Annualized FTE	59,457	68,000	28,795	29,510	36,000
Fall First-Time Freshmen Headcount	10,864	12,750	4,778	4,942	5,500
Fall Low-Income Student Headcount	18,122	22,000	5,673	5,985	6,300
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	3,139	2,939	3,300
Fall Adult (25+) Headcount	4,307	11,500	1,519	1,656	1,800
Success					
Students Passing Developmental Courses	2014		2014		
Math	69.4%	70%	57.1%	**	70.0%
English	76.7%	75%	.	**	0.0%
Developmental Students Passing College-Level Course	2014		2014		
Math	44.5%	60%	0.0%	**	0.0%
English	71.2%	70%	.	**	0.0%
Retention	2014		2014		
Full-Time, First-Time Freshmen	74.9%	80%	80.4%	**	83.0%
Part-time, First-Time Freshmen	45.4%	50%	63.2%	**	50.0%
Low-Income First-Time Freshmen	67.6%	75%	74.7%	**	80.0%
Returning Adults	55.1%	65%	48.9%	**	60.0%
Transfer Students	72.8%	76%	79.8%	**	82.0%
Underrepresented Racial/Ethnic Group Total	63.3%	75%	72.7%	**	80.0%
Progress Toward Degree					
First-Time Freshmen Earning 30 Hours	50.0%	65%	58.3%	**	62.5%
Four-Year Graduation Rate	<i>Cohort Years:</i> 2012		2012		2014
First-Time Freshmen	27.3%	30%	31.5%	**	35.0%
Low-Income First-Time Freshmen	19.6%	20%	24.4%	**	23.0%
Returning Adults	38.1%	48%	44.8%	**	47.0%
Transfer Students	44.9%	48%	49.2%	**	57.0%
Underrepresented Racial/Ethnic Group Total	16.0%	20%	19.4%	**	20.0%
Six-Year Graduation Rate	<i>Cohort Years:</i> 2010		2010		2012
First-Time Freshmen	47.2%	60%	56.4%	**	60.0%
Low-Income First-Time Freshmen	37.6%	40%	50.1%	**	48.0%
Returning Adults	42.4%	58%	47.1%	**	56.0%
Transfer Students	52.4%	58%	60.5%	**	67.0%
Underrepresented Racial/Ethnic Group Total	33.0%	40%	45.6%	**	45.0%
Impact					
Degrees Awarded	13,741	15,500	6656	6,487	6750
STEM Degrees	3,475	3,750	415	423	461
STEM Education Degrees	138	**	266	252	NA
Health Degrees	2,012	2,000	120	97	NA

WVU Institute of Technology

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HIGHLIGHTS

- West Virginia University Institute of Technology is working to enhance and improve its early enrollment efforts in collaboration with K-12. The institution indicated that it is working with WVU and Potomac State College to develop and launch a common admission application for the three campuses.
- The institution has strengthened articulation agreements with community colleges and partnered with a flight school to offer an aviation management degree.
- The institution has met or exceeded its 2018 Compact goals for the percentage of developmental education students passing developmental and subsequent college-level courses.
- The institution established a goal to take advantage of early FAFSA completions to award financial aid as early as December. The institution is also working to improve its processes to provide consistency and efficiencies across campuses. The success of its efforts to improve the scholarship awarding process resulted in an 11 percent yield increase.
- WVU Tech is currently experiencing a number of challenges with its relocation from Montgomery to Beckley. The institution has focused retention efforts on its student success center and the math department, with a particular focus on developmental students.

CONCERNS/RECOMMENDATIONS

- WVU Tech continues to offer non-credit, zero-numbered developmental education courses.
- Enrollment growth of 20 to 25 percent between 2015-16 and 2017-18 will be necessary for WVU-Tech to achieve its 2017-18 Fall Headcount and Annualized FTE enrollment targets. Additionally, Fall Adult Headcount Enrollment reached a five-year low in 2015-16, despite the fact that it hired a dedicated RBA program coordinator in 2012-13.
- Both of the institution's Graduation Rates activities rely on the administration of a survey that has yet to be completed. Even with the survey complete and results in hand, it is likely these activities will have little impact on graduation rates in the span of the reporting cycle, especially considering that the committee must meet to create the action plan once survey results are collected and analyzed.

RECOMMENDATION OF THE REVIEW TEAM

The review team recommends **approval of the 2016 WVU Institute of Technology Compact update.**

SUMMARY OF 2018 INSTITUTIONAL TARGETS

	System		WVU Institute of Technology			
	2015	System Goal	2015	Five Year Average	2018 Target	
Access						
Fall Head Count	64,548	73,500	1,260	1,231	1,600	
Annualized FTE	59,457	68,000	1,083	1,048	1,300	
Fall First-Time Freshmen Headcount	10,864	12,750	269	264	400	
Fall Low-Income Student Headcount	18,122	22,000	487	491	500	
Fall Underrepresented Racial/Ethnic Group Total	7,122	6,700	181	161	150	
Fall Adult (25+) Headcount	4,307	11,500	244	278	400	
Success						
Students Passing Developmental Courses	2014	2014				
Math	69.4%	70%	64.3%	**	70.0%	
English	76.7%	75%	88.0%	**	80.0%	
Developmental Students Passing College-Level Course	2014	2014				
Math	44.5%	60%	27.7%	**	35.0%	
English	71.2%	70%	69.9%	**	55.0%	
Retention	2014	2014				
Full-Time, First-Time Freshmen	74.9%	80%	58.9%	**	65.0%	
Part-time, First-Time Freshmen	45.4%	50%	62.5%	**	60.0%	
Low-Income First-Time Freshmen	67.6%	75%	57.4%	**	60.0%	
Returning Adults	55.1%	65%	45.7%	**	60.0%	
Transfer Students	72.8%	76%	59.8%	**	70.0%	
Underrepresented Racial/Ethnic Group Total	63.3%	75%	40.0%	**	50.0%	
Progress Toward Degree						
First-Time Freshmen Earning 30 Hours	50.0%	65%	37.7%	**	35.0%	
Four-Year Graduation Rate	<i>Cohort Years:</i>	2012	2012		2014	
First-Time Freshmen		27.3%	30%	18.7%	**	20.0%
Low-Income First-Time Freshmen		19.6%	20%	12.5%	**	15.0%
Returning Adults		38.1%	48%	24.2%	**	40.0%
Transfer Students		44.9%	48%	51.4%	**	60.0%
Underrepresented Racial/Ethnic Group Total		16.0%	20%	11.1%	**	10.0%
Six-Year Graduation Rate	<i>Cohort Years:</i>	2010	2010		2012	
First-Time Freshmen		47.2%	60%	31.9%	**	40.0%
Low-Income First-Time Freshmen		37.6%	40%	23.9%	**	30.0%
Returning Adults		42.4%	58%	44.1%	**	45.0%
Transfer Students		52.4%	58%	41.7%	**	55.0%
Underrepresented Racial/Ethnic Group Total		33.0%	40%	20.7%	**	15.0%
Impact						
Degrees Awarded	13,741	15,500	147	145	160	
STEM Degrees	3,475	3,750	83	78	90	
STEM Education Degrees	138	**	0	0	0	
Health Degrees	2,012	2,000	3	5	12	

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Report on West Virginia Business College Accreditation and Financial Issues

INSTITUTION: West Virginia Business College

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Corley Dennison

BACKGROUND:

West Virginia Business College, with campuses in Wheeling and Nutter Fort, received a notice of denial of renewal of accreditation from its accreditation body, the Accrediting Council for Independent Colleges and Schools (ACICS). While this is a proprietary institution and falls under the West Virginia Council for Community and Technical College Education Series 35, Legislative Rule, Correspondence, Business, Occupational, and Trade Schools, it is important for the Commission to be informed as well. Also, an audit discovered approximately \$70,000 in inconsistencies related to the spending of state supported financial aid funds. As a result of this financial aid audit by Commission staff, the Commission will consider a recommendation on whether to allow West Virginia Business College to continue receiving state financial aid funds under the Higher Education Grant Program in a separate agenda item.

Campus officials of West Virginia Business College received a letter from the ACICS, dated December 22, 2016 identifying 48 findings and serious concerns related to accreditation criteria. Some of those concerns include the following:

- The campus could not demonstrate that it reflects high ethical standards in its relations with students.
- The administrator in the surgical technology program (Wheeling campus) does not have the qualifications to administer or teach in the program.
- Questioned the qualification/credentials of at least two faculty members at the Nutter Fort campus.
- Determined that pre-requisite course requirements were not being followed in a number of programs at the Nutter Fort campus.
- The Nutter Fort campus does not provide appropriate equipment and instructional resources to support the surgical technology, medical assistant and nurse assistant/patient care aide programs.

Furthermore, the letter reads on page 10: "...the likelihood that the institution can come into compliance with the *Criteria* within a reasonable time frame is called into question,

especially given its history of renewal accreditation visits with similar findings and concerns.”

West Virginia Business College has appealed this decision and ACICS has until April 30, 2017 to consider the appeal. Until the appeal is considered, West Virginia Business College can maintain its current status.

Given the seriousness of the accreditation situation and the financial aid audit, Council staff will be scheduling a comprehensive site visit to both the Wheeling and Nutter Fort campuses. The site visit team will consist of members of the 2-year Reauthorization Committee and any external members deemed necessary by Council staff. Site team members shall seek comprehensive financial audit information, interview students, review curricula, faculty credentials, facilities, instructional materials, review bond surety requirements, and gather any other information necessary for the formation of a recommendation related to Series 35 authorization to confer degrees West Virginia. Committee findings shall be made available to the Council at its meeting of April 20, 2017 and prior to any reauthorization of the permit to operate in West Virginia as stated in Series 35.

The West Virginia Council for Community and Technical College Education will receive this information at its January 26, 2017 meeting keeping both entities apprised of all information related to West Virginia Business College. Any action by the Commission related to West Virginia Business College and the Higher Education Grant Program will be duly reported to the Council and any action related to Series 35 by the Council shall be reported to the Commission.

**West Virginia Higher Education Policy Commission
Meeting of February 3, 2017**

ITEM: Determination of Institutional Eligibility for the West Virginia Higher Education Grant Program

INSTITUTION: West Virginia Business College

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission determines that West Virginia Business College is to be excluded from participating in the Higher Education Grant Program at the conclusion of the 2016-17 award year and that no new awards be made for the remainder of the 2016-17 award year.

Further Resolved, That this determination is subject to the regular due process and appeal as provided in Series 42.

STAFF MEMBER: Brian Weingart

BACKGROUND:

In 2012, the Division of Financial Aid conducted a program review of the West Virginia Higher Education Grant Program (HEGP) at West Virginia Business College. Several deficiencies were found at that time and the institution was instructed to correct those deficiencies. Commission staff visited the institution and held conference calls with institutional officials to train and assist them in administering the HEGP.

In June and July 2016, another program review was conducted at West Virginia Business College. At that time, records for 45 of the 111 students who received the HEGP between the 2012-13 and 2014-15 award years were reviewed for HEGP eligibility. Of the 45 students selected for review, 22 were identified as ineligible. Commission staff determined that West Virginia Business College should return \$30,798 in HEGP funds issued to ineligible students.

A review of 142 students who received disbursements between the 2012-13 and 2015-16 award years showed 77 students had issues regarding the disbursement of funds. There were 24 cases resolved because they pertained to the 2015-16 award year and it had not closed at the time of the review. Of the remaining issues regarding student

disbursements, \$37,602 in HEGP funds were paid to the institution but not disbursed to the student.

West Virginia Business College should return a total of \$68,400 in HEGP funds.

West Virginia Business College has experienced significant turnover in the position that administers the Higher Education Grant, which appears to have led to inconsistencies. There are no electronic processes to administer the Higher Education Grant, resulting in inefficiencies, lack of oversight, and reduced checks and balances. Based upon the review, Commission staff determines that West Virginia Business College has seriously mismanaged the HEGP and lacks institutional controls to manage the program properly.

Staff recommends that West Virginia Business College lose their eligibility to participate in the HEGP at the end of the 2016-17 award year, and not be allowed to grant any new awards for the remainder of the year. West Virginia Business College should substantiate eligibility and payment to any current students for the remainder of the 2016-17 award year. No current, eligible recipients should be harmed.

Pursuant to Series 42, *West Virginia Higher Education Grant Program*, the Vice Chancellor for Administration may exclude an institution from participating in the HEGP upon a determination by the Commission that the institution has seriously mismanaged HEGP funds or lacks institutional controls to manage such funds properly. Any such decision may be appealed in writing by the institution to the Vice Chancellor for Administration within fifteen (15) days of receiving notification from the Vice Chancellor.