

**Eastern West Virginia
Community & Technical College**

Program Review

Accounting, Associate in Applied Science

May 2018

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

**Eastern West Virginia Community and Technical College
Program Review**

Name and degree level of program:

Associate in Applied Science degree in Accounting.

Program Overview

The Associate in Applied Science degree in Accounting was developed in 2010 to better serve the needs of employers in Eastern's district. This degree incorporated existing courses from general education, business management, as well as the curriculum designed for the certificate in accounting.

The Associate in Applied Science in Accounting degree addresses the labor needs of various types of organizations. These organizations include accounting firms, financial institutions, federal and state operations, manufacturers, health related establishments, utilities, and other services-organizations. Examples of jobs graduates possessing this degree will be qualified for include entry level opportunities such as accounting clerks, accounts receivable/accounts payable clerks, payroll clerks, and bookkeepers.

Please see Appendix I for program description.

Synopses of significant findings, including findings of external reviewer(s):

The graduates of the Accounting program have the option of applying to the Bachelor's degree programs at Franklin University or West Virginia University. Based on the existing data for the past five years, thirty percent of the graduates of this program continued beyond the Associate degree level. Several program graduates completed a second Associate degree/Certificate in Business Management, Information Technology, and/or Administrative Support Technology.

Twenty-two graduates of the Certificate in Applied Science in Accounting continued on toward an Associate degree. All graduates who took courses beyond the CAS level, have completed at least one Associate degree. All graduates of the certificate program completed at least one AAS program. This indicates the retention rate for the certificate level to the Associate degree level stands at a rate of 100%.

In fall 2015, the college received approval as a testing site for the Microsoft Office Specialist and Computerized Accounting certification. Only two accounting students registered for the national examination. Students who opt not to pursue industry certification note the cost of the examination (\$95 per exam) as the prohibiting factor. It is expected that more students will try MOS certification in the future.

The Associate in Applied Science in Accounting is a low cost program. The revenues generated by the program exceed the expenses, thus leaving the college with a positive net income.

The Accounting program currently utilizes three adjunct and one full-time faculty for all the core and elective courses. In fall 2012, the college hired a full-time business faculty with academic and industry experience. This faculty teaches 20% of accounting related courses and is well liked by the students.

No external review was conducted for this program. However, the NOCTI test and the ETS Proficiency Profile are administered as external assessment of the program's efficacy. Ten (10) Accounting students

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

took the NOCTI test during a three-year period.

Mapping of the program’s outcomes and NOCTI’s outcomes:

NOCTI Outcomes		1	2	3	4	5	6	7	8	9	Eastern NOCTI Avg.	NOCTI National Agv.	Outperformed	Underperformed
					GEN ED			GEN ED	ETS	ETS				
BANNER C	Title													
F10A	Journalizing	x									59.8	68.4		-8.6
F10B	Posting	x	x								60.5	66.9		-6.4
F10C	Payroll Preparation	x	x								63.2	64.4		-1.2
F10D	Cash and Banking Procedures	x									76.9	73.3	3.6	
F10E	Merchandise Inventory	x		x							59.4	64.6		-5.2
F10F	Completion of Accounting Cycle	x									58.2	63.4		-5.2
F10G	Identification and Application of Source Data		x		x						73.6	76.9		-3.3
F10H	Mechanical and Electrical Accounting Devices		x		x						75.6	77.4		-1.8
F10I	Security					x	x				55.5	60.8		-5.3
F10J	Basic Accounting Knowledge			x		x	x				86.1	75.6	10.5	
PF10	NOCTI Accounting (Weighted Average)										66.5	68.2		-1.7
Program Outcomes - AAS Accounting														
1	Prepare, record and analyze financial statements and other reporting documents according to generally accepted accounting principles													
2	Demonstrate proficiency in utilizing accounting software programs													
3	Interpret, analyze, and evaluate financial data													
4	Demonstrate proficiency in computer applications													
5	Demonstrate a basic knowledge of business organization and procedures													
6	Identify and apply elements of contract, tort, agency, property law, partnerships and corporations													
7	Develop scientific knowledge and mathematical analytical skills and techniques													
8	Demonstrate effective communication skills													
9	Demonstrate global awareness and knowledge of human diversity													

Based on the above results, more emphasis should be placed on Journalizing, Posting, Merchandise Inventory, and Completion of Accounting Cycle which relate to program outcomes one, two, three and four respectively. These outcomes are largely delivered via the courses Principles of Accounting I & II and Intermediate Accounting I & II.

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

Course level assessment:

The following fifteen program courses have been assessed / reviewed during this review period. Before the college used Blackboard for assessment, only an average of 10 percent of the outcomes were assessed. However, reducing the number of outcomes and using Blackboard for assessment have allowed the college to increase the percentage of assessed outcomes from an average of 10% for a course to an average of more than 90% per course.

Year	Semester	Sbj.	Crs. #	# of Students	Crs. Avg.	Target for Assessed	Performance +/-	% of Outcomes Assessed	Action Plan / Notes
2015	Fall	CIS	119	12	61%	75%	-14%	85%	Performance improved in 2016 and 2017 / No actions required/
2016	Fall	CIS	119	15	84%	75%	9%	100%	Performance has improved since last time the course was offered - focus on unmet outcomes
2017	Spring	CIS	119	21	85%	75%	10%	100%	Performance improved since last time the course was offered
2017	Spring	ACC	250	7	91%	75%	16%	100%	No Action is needed - focus on unmet outcomes
2013	Fall	ACC	120	26	94%	75%	19%	11%	Outcomes of this course were reduced to simplify assessment
2014	Spring	ACC	121	22	83%	75%	8%	11%	Outcomes of this course were reduced to simplify assessment
2013	Spring	ACC	240	8	88%	75%	13%	10%	Outcomes of this course were reduced to simplify assessment
2014	Summer	BUS	101	11	89%	75%	14%	79%	Outcomes of this course were reduced to simplify assessment

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

2012	Fall	BUS	101	11	88%	75%	13%	12%	Outcomes of this course were reduced to simplify assessment
2014	Spring	BUS	206	11	90%	75%	15%	10%	Outcomes of this course were reduced to simplify assessment
2014	Fall	ECN	201	21	85%	75%	10%	10%	Outcomes of this course were reduced to simplify assessment
2013	Fall	ECN	201	14	89%	75%	14%	10%	Outcomes of this course were reduced to simplify assessment
2014	Spring	ECN	202	9	84%	75%	9%	10%	Outcomes of this course were reduced to simplify assessment
2013	Spring	ECN	202	14	73%	75%	-2%	10%	Outcomes of this course were reduced to simplify assessment
2012	Fall	FIN	232	7	89%	75%	14%	20%	Outcomes of this course were reduced to simplify assessment

Data on four accounting courses (ACC 250, ACC 251, FIN 231 and FIN 232):

These are very specific accounting courses that are usually taken by students who intend to pursue an accounting degree. Overall, more than 80% of the students who take these four courses are accounting students, making the performance of these courses accurate indicators of how successful accounting students are.

- Average class size: 8
- Pass rate: 95%
- Average Class GPA: 3.35
- Average Number of Withdrawals per class: 4%
- Average Number of Failing Students in Accounting Classes (ACC 250, ACC 251, FIN 201 and FIN 232): 5%
- Persistence rate from Intermediate Accounting I to Intermediate Accounting II: Above 85% for students seeking AAS in Accounting

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

Assessment of General Education Courses:

Semester	Course Assessed	# of Students	Target for assessed outcomes	Result
Spring 2013	GSC 110	16	75%	50% outcomes met at 75% or above.
Spring 2013	MTH 121	9	75%	25% outcomes met at 75% or above.
Fall 2013	CIS 108	25	75%	91.5% of outcomes met at 75% or above.
Spring 2013	CIS 108	17	75%	75% outcomes met at 75% or higher
Spring 2014	CIS 108	25	75%	97%outcomes met at 75% or above.
Spring 2013	CIS 108	17	75%	100% outcomes met at 75% or higher
Fall 2013	CIS 108	25	75%	100% outcomes met at 75% or higher
Spring 2014	CIS 108	25	75%	100% outcomes met at 75% or higher
Fall 2014	MTH 115	10	75%	50% outcomes met at 75% or higher
Fall 2015	CIS 114	9	75%	44.4% outcomes met at 75% or higher
Spring 2012 – Spring 2015	ENL 101	235	75%	70.1% outcomes met at 75% or higher

On average, the outcomes of the program courses are met at above 75% target.

Employers' satisfaction:

Two of the accounting firms in Moorefield and Petersburg that have hired Eastern's graduates have indicated that they are very satisfied with the accounting skills of the graduates.

Comments by the internship providers regrading Eastern's interns:

1. She exemplifies a good working relationship with her customers, co-workers and employer. She is always punctual and dependable

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

2. She has done a great job in the business office this semester. She has done a great job considering multiple systems we use

Success of students in four year colleges:

Two graduates of the program completed a bachelor's degree in accounting through Franklin University. Currently, three accounting graduates are completing their bachelor's degrees through Franklin University. All three have been very successful so far. They expect to complete their programs in the next few months.

Plans for program improvement, including timeline:

Almost all graduates of Eastern's business technologies programs who transfer to four year colleges, choose only online programs and do not show any interests in the face-to-face programs of other institutions.

In the 2018 – 2019 academic year, the college plans to apply for the HLC's approval to offer its Business Management and Information Technology programs online. Upon approval, the college will be able to offer more accounting courses in an online format which should help enrollment and improving the availability of the courses in the program.

The number of graduates of the Accounting program is expected to remain at a constant rate of four (4) students per year for the next five years.

Last summer, WVU's Associate Dean of the Business School visited Eastern and discussed WVU's new online Bachelor's degree in Business Management. Graduates and current Accounting students are aware of this opportunity. Many courses of the Accounting program are transferable to the Business Management program at WVU. Several business and accounting students have shown interest in WVU's online business degree. A cohort of these students are placed in College Algebra for this fall semester in order to complete one of the required courses for the Bachelor's degree program. Upon completion of the course by these students, the college might encourage the math department to offer Calculus I (If there is enough interest) which is another required math for the Bachelor's degree program, but not a required course for the AAS program.

Identification of weaknesses or deficiencies from the previous review and the status of improvements implemented or accomplished

In the past five years, the quality of instruction has improved due to availability of well-qualified full-time and part-time instructors. In the past four years, several Business Technologies instructors have received certification in Quality Matters. More Business, IT and General Education instructors will be certified in the near future. The college plans to apply Quality Matters standards to both online and hybrid courses.

In fall 2014, the College administered the NOCTI test for the first time. The test results give the college an opportunity to assess the program outcomes, providing information which highlights areas of underperformance for improvement. NOCTI evaluation also helps Eastern to compare the students' performance with the performance of students from other institutions.

The college is currently expanding its partnership with Potomac State College, Franklin University, Frostburg State University and West Virginia University in order to facilitate transfer of students to

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

Bachelor's degree programs.

In 2017, the IRS contacted Eastern. The Agency indicated the College's district did not have Volunteer Income Tax Assistance (VITA) program access. The IRS inquired as to whether the accounting students and/or accounting graduates could help with establishing the VITA program. This tax season with the help of several accounting graduates and students, VITA assisted area residents with tax preparation. Serving in the VITA program is currently incorporated into the program internship. Accounting students are encouraged to serve in VITA's program and will receive credit for their Internship. The activities of these students are examples of co-curricular activities.

Accounting textbooks are among the most expensive books at community colleges. To reduce the cost of the textbooks to students, the instructor teaching the Income Tax Accounting courses uses free materials offered by the IRS website. Using the IRS materials saves the students \$400 in textbook costs. Each of the textbooks for Intermediate Accounting, Personal Finance and Business Finance costs more than \$250, as the older editions of these books are no longer supplied by the publishers. The college has purchased the older editions of these textbooks. The Accounting students can borrow these books at no cost or purchase them from Amazon for less than \$30.

Five year trend data on graduates and majors enrolled:

Enrollment and Graduates from fall 2012 to spring 2017:

	Headcount	FTE	Full-Time	Graduates
Fall 2012	2	1.9	2	0
Spring 2013	3	2.8	3	6
Fall 2013	2	1.9	1	1
Spring 2014	3	2.3	1	3
Fall 2014	5	2.8	1	1
Spring 2015	5	3.2	1	3
Fall 2015	10	6.9	6	0
Spring 2016	5	3.9	4	6
Fall 2016	4	2.9	3	1
Spring 2017	3	2.1	2	4
Total	42*	30.7	24	25*

**The total number of graduates (25) are unduplicated, while the total Headcount (42) is duplicated as it takes several semesters for students to complete the program.*

Summary of Assessment Model and Utilization for Program Improvement

Eastern's assessment plan consists of three levels: entry-level assessment (ACCUPLACER, SAT, ACT), active enrollment assessment (course and program assessment, student satisfaction surveys, etc.), and post-graduation assessment (employment satisfaction survey, alumni survey, employment and salary data, etc.). Since December 2014, Accounting students participated in taking the NOCTI exam, which delivers

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

a variety of assessments for students studying career and technical programs at technical colleges. IDEA Short Form Reports (i.e. course evaluation surveys) are administered each semester in all course sections with enrollment of six or more students. Course completion rates and student tracking studies are used as a measure of overall program success. Regular assessment of Accounting courses will provide recommendations for improvements so that future Assessment Reports will address any shortcomings.

The college utilizes Blackboard’s “Goals” feature that allows computerized assessment of the courses by generating reports and by linking the course outcomes to assignments, exams, projects and discussion board. Using Blackboard for assessment has simplified the assessment process for all Business Technologies courses.

Based on the recommendation of the visiting HLC team in 2013, the number of Learning Outcomes for accounting courses were reduced from an average of 35 outcomes per course to an average of 10 outcomes. This revision has streamlined the assessment process.

Some of the AAS students take the Internship during their final semester. As a requirement for the course, the internship providers evaluate students by submitting a questionnaire. A review of these questionnaires has indicated the interns are meeting the internship providers’ expectations.

Beginning in the spring 2008 semester, Eastern began administering the ETS Proficiency Profile. Administrative Support Technology, A.A.S. students have participated in this testing since 2010. Based on the test results, Eastern’s graduates score within the mean score ranges noted in ETS Comparative Scores for Associate Degree granting institutions. (See Table below).

Table 1 – ETS Results Eastern Students (2011-2015): Comparison Between Eastern Test Groups and ETS Mean Scores						
	Eastern 2010 – 2011 Mean = 436.78	Eastern 2011-2012 Mean = 443.86	Eastern 2012-2013 Mean = 438.33	Eastern 2013-2014 Mean = 444.04	Eastern 2014-2015 Mean = 444.33	ETS Mean = 439.3
% above mean	47%	49%	45%	42%	45%	47%
% below mean	52%	51%	55%	58%	55%	53%

From fall 2012 to spring 2017, fifteen accounting related courses have been assessed. On average, students have scored at least 70% in meeting the course outcomes. The assessed courses are Principles of Accounting I, Principles of Accounting II, Intermediate Accounting II, Introduction to Business, Business Law, Principles of Microeconomics, Principles of Macroeconomics, and Personal Finance.

During a three-year period, nine accounting graduates took the NOTCI test. The average score for these students is 66. The national average score for this test is 68.2 with the cut score of 47.7. (Please see table below)

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

Accounting AAS Subscores		Student									Subscore Eastern Students Performance	NOCTI National Performance
BANNER Code	Title	1	2	3	4	5	6	7	8	9		
F10A	Journalizing	53.90	50	42.3	53.9	73.1	69.2	46.1	84.6	65.4	60	68.4
F10B	Posting	61.10	55.6	50	33.3	83.3	66.7	61.1	61.1	72.2	60	66.9
F10C	Payroll Preparation	37.10	60	48.6	68.6	77.1	62.9	51.4	82.9	80	63	64.4
F10D	Cash and Banking Proc	65.40	69.2	69.2	84.6	69.2	96.02	53.9	92.3	82.3	76	73.3
F10E	Merchandise Inventor	23.50	47.1	52	70.6	64.7	70.6	70.6	64.7	70.6	59	64.6
F10F	Completion of Account	32.00	52	44	44	68	72	52.2	88	72	58	63.4
F10G	Identification and App	50.00	75	75	75	75	87.5	50	100	75	74	76.9
F10H	Mech/ Elect Accounti	50.00	70	70	70	80	90	80	80	90	76	77.4
F10I	Security	46.70	46.7	33.3	73.3	66.7	53.3	53.3	53.3	73.3	56	60.8
F10J	Basic Accounting Know	46.63	92.9	78.6	78.6	92.9	92.9	64.3	100	85.7	78	75.6
PF10 Avge (Weighted)	NOCTI Acct.	48.60	59.8	63.6	63.9	74.2	74.2	56.2	80.9	77.3	66	68.2

Data on student placement and Graduates Profile

Based on a review of twenty-five students who graduated between fall 2012 and spring 2017:

- Eight graduates: No information is available

Of the remaining 17 graduates:

- Sixteen (94%) have at least another associate or a certificates in other fields such as Business Management
- At least twelve (70%) have jobs related to their field of study. Many of these graduates have other degrees and certificates. It is unknown if the success of these graduates is the result of having an AAS degree in Accounting or having other degrees such as an AAS in Business Management
- Three are working on a Bachelor's degree in Accounting through Franklin University.
- One completed a Bachelor's degree in Accounting through Franklin and completed a Master's degree in Accounting through American Public University.
- At least two (12%) have jobs not related to their field of study.
- Two graduates started their own businesses; one didn't succeed
- One completed a Bachelor's degree in Accounting and a Master's degree in Business Administration and is currently working on a Doctoral degree in Business Administration though Franklin University.
- At least one is working on RBA through WVU
- All except one are females
- All (100%) live in the state of West Virginia
- The average graduate of the program has more than seventy-five credit hours in his/hers transcripts due to being a double or triple major. The additional credit hours in the students' transcripts have encouraged many graduates to pursue a Bachelor's degree.

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

Final recommendations approved by governing board.

To better serve the needs of Eastern's six-county district, it is recommended that the program continues to be offered in its current format with full-time day course implementation, increases the number of 2+2 articulation agreements, and to explore the feasibility of offering the Accounting program as a Web-based program.

Additionally,

- Promote industry certification
- Revise curriculum by adding more quantitative courses to the list of restricted electives
- Apply Quality Matters standards to online and hybrid courses
- Utilize technology to better assess courses and their corresponding program
- Facilitate the transfer of graduates to four year institutions

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

Appendix I

Accounting Associate in Applied Science 60 Semester Hours[^]

ONETonline.org SOC Code: 13-2011

The Associate of Applied Science in Accounting program provides a technical education at an Associate of Applied Science degree level. It is a broad based curriculum that provides instruction and practical application of a variety of Accounting concepts and practices.

Successful completion of the Accounting program will allow graduates to enter the workforce at the Accounting technician level. The program provides the student with strong accounting, business and technical skills. They will be prepared for employment or promotion in accounting firms, private industry, or government.

To be accepted into the Accounting, A.A.S. program, students must complete ACC 120 and ACC 121 with a grade of "C" or higher. Students who have not completed ACC 120 and ACC 121 should initially major in the Accounting Certificate in Applied Science.

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

- Prepare, record, and analyze financial statements and other reporting documents according to generally accepted accounting principles
- Demonstrate proficiency in utilizing accounting software programs
- Interpret, analyze, and evaluate financial data
- Demonstrate proficiency in computer applications
- Demonstrate a basic knowledge of business organizations and procedures
- Identify and apply elements of contract, tort, agency, property law, partnerships and corporations
- Develop scientific knowledge and mathematical analytical skills and techniques
- Demonstrate effective communication skills
- Demonstrate global awareness and knowledge of human diversity

Program Implementation: Full-time day (Students attending part-time should see advisor for recommended course sequencing).

Recommended Course Sequence: Accounting, Associate in Applied Science

First Year—Fall Semester				First Year — Spring Semester			
Dept.		Course Title	Sem. Hrs.	Dept.		Course Title	Sem. Hrs.
ACC	120	Principles of Accounting I	3	ACC	121	Principles of Accounting II	3
BUS	101	Introduction to Business	3	ACC	240	Computerized Accounting	3
				BUS	203	Communications in Business OR	3
CIS	114	Introduction to Computer Applications and Concepts	(3)	ENL	102	English Composition II	(3)
ENL	101	English Composition I	3	ECN	201	Principles of Macroeconomics OR	3
SSC	147	Understanding Human Diversity	3	ECN	202	Principles of Microeconomics	(3)
						<i>Elective</i> Accounting Elective	3
Total Semester Hours			15	Total Semester Hours			15
Second Year—Fall Semester				Second Year—Spring Semester			
Dept.		Course Title	Sem. Hrs.	Dept.		Course Title	Sem. Hrs.
ACC	250	Intermediate Accounting I	3	ACC	251	Intermediate Accounting II	3
CIS	119	Spreadsheet Software	3	BUS	206	Business Law	3
Elective		Accounting Elective	3	BUS	276	BUS Capstone OR	3
Elective		Math Elective (MTH 121 or higher)	3	BUS	278	BUS Internship	(3)
Elective		Science Elective	3 (4)	Elective		Accounting Elective	3
				Elective		Accounting Elective	3
Total Semester Hours			15 (16)	Total Semester Hours			15

Accounting Electives (Select 4 courses - 12 credit hours)

Dept.		Course Title	Sem. Hrs.
ACC	230	Income Tax Accounting	3
ACC	235	Managerial Accounting	3
FIN	231	Business Finance	3
FIN	232	Personal Finance	3
MTH	115	Business Math	3

Approved by Assessment: 6/12/18

Approved by LOT: 6/19/2018

Approved by Cabinet: 7/10/2018

Approved by Board of Governors: 9/19/18

MTH	135	College Algebra	3
MTH	225	Introduction to Statistics	3

Approved by Assessment: 6/12/18
Approved by LOT: 6/19/2018
Approved by Cabinet: 7/10/2018
Approved by Board of Governors: 9/19/18