

**Eastern West Virginia  
Community & Technical College**

**Program Review**

**Accounting, Certificate in Applied Science**

**Fall 2017**

# Post-Audit Review

West Virginia Council for Community and Technical College Education

**Institution:** Eastern West Virginia Community and Technical College

**Program (Degree and Title):** Accounting, Certificate in Applied Science

## Program Overview

The Associate in Applied Science degree in Accounting was developed in 2009. Graduates of this Certificate program will serve the labor needs of many organizations including accounting firms, financial institutions, federal and state organizations, manufacturers, health related establishments, utilities, and other service organizations. Examples of jobs graduates will be qualified for include entry-level jobs such as accounting clerks, accounts receivable/accounts payable clerks, payroll clerks, and bookkeepers. This certificate program provides the opportunity for business students to improve their accounting skills. It also allows them to achieve greater specialization in the field of accounting.

The Accounting, Certificate in Applied Science assists students to develop effective computation and communications skills in the field of Accounting. The graduates of the certificate program will develop basic skills using the fundamentals of Accounting principles. They will also build a solid foundation in pursuing an AAS in Accounting or Business Management. Accepted applicants into the program include those with a high school diploma or GED. All courses in the program are transferable to the AAS programs in either Business Management or Accounting.

Please see Appendix I for program description.

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

Eastern has offered the Certificate in Accounting for the past nine years. From fall 2010 to spring 2013, the program had three graduates. However, during this evaluation cycle the number of graduates has increased from three to twenty-two. This increase resulted from the faculty being proactive in encouraging AAS students in Accounting to apply for the certificate. Other contributing factors to the increased number of graduates include strong student support services, high retention rates, and graduation fee waivers for the certificate. The review of the data indicates the number of graduates of the Certificate program will remain at a constant rate of four students per year for the next five years.

A review of twenty-two graduates from the Certificate in Applied Science in Accounting indicated that all completers of CAS program continued toward an Associate degree. All graduates who took courses beyond the CAS level have completed at least one associate

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degree. This indicates that the retention rate from the certificate level to the associate degree level stands at a rate of 100%.

There was no external review conducted for this program. However, the NOCTI test is administered as an external assessment of the program's efficacy. Eleven Accounting students took the NOCTI test during a three-year period. Results revealed those students scored an average of 65.36 compared to the national average score of 66.4.

All the required courses in the Accounting Certificate program are offered in the AAS programs of Business Management, Administrative Support Technology, Information Technology, and Accounting. As a result, the cost of running those courses is minimal and is completely absorbed by the AAS Business Technologies programs.

The Accounting program does not have full-time faculty. The Accounting program currently utilizes four adjunct and a full-time business management faculty for all core and elective courses.

The revenues generated by the tuition exceed the expenses, thus leaving the college with a positive net income.

**Comments by the employers:**

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

**Data on four accounting related courses (Intermediate Accounting I and II, Business Finance and Personal Finance):**

- 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

Mapping of the certificate's outcomes and NOCTI's outcomes:

NOCTI Outcome4s		1	2	3	4	5	6	Eastern NOCTI Avg.	NOCTI National Avg.	Outperformed	Underperformed
BANNE Title					GEN ED	GEN ED					
F10A	Journalizing	x						63.28	66.5		-3.22
F10B	Posting	x	x					60.65	65.6		-4.95
F10C	Payroll Preparation	x	x					59.74	62.7		-2.96
F10D	Cash and Banking Procedures	x	x					83.23	73.4	9.83	
F10E	Merchandise Inventory	x						56.13	62		-5.87
F10F	Completion of Accounting Cycle	x						57.09	60.09		-3
F10G	Identification and Application of Source Data		x					68.46	74.9		-6.44
F10H	Mechanical and Electrical Accounting Devices		x					75.45	76.9		-1.45
F10I	Security	x						60	59.1		0.9
F10J	Basic Accounting Knowledge	x		x			x	76.62	74.1	2.52	
PF10	NOCTI Accounting (Weighted Average)							65.36	68.2		-2.84
<b>Program Outcomes - AAS Accounting</b>											
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	Analyze financial data										
4	Demonstrate effective communication and computational skills										
5	Demonstrate proficiency in computer applications										
6	Demonstrate a basic knowledge of business organization and procedures										

Based on the students' performance in NOCTI test, students will benefit if more emphasis is placed on merchandise inventory, posting, and identification of application data source which relate to outcomes one and two. The college has hired a part-time instructor with teaching and industry experience to address this issue.

**Course level assessment:**

Fifteen program courses were assessed during this review period. The college is utilizing Blackboard Goals tool to assess almost all the outcomes of the courses. Reducing the number of course outcomes has streamlined the assessment process.

The following courses have been assessed / reviewed during this review period:

Year	Semester	Sbj.	Crs. #	# Of Students	Crs. Avg.	Target for Assessed Outcomes	Performance +/-	% of Assessed Outcomes	Action Plan / Notes
2015	Fall	CIS	119	12	61%	75%	-14%	85%	Performance improved in 2016 and 2017 / No actions required/ Faculty

2016	Fall	CIS	119	15	84%	75%	9%	100%	Performance improved since previous year - focus on unmet outcomes
2017	Spring	CIS	119	21	85%	75%	10%	100%	Performance improved since previous year
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%		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
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%		Outcomes of this course were reduced to simplify assessment

**Sample / Summary of Assessment of General Education Courses:**

Semester	Course Assessed	# of Students	Target for assessed outcomes	Result
Spring 2013	MTH 121	9	75%	25% of 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% of outcomes met at 75% or higher
Spring 2014	CIS 108	25	75%	97% of 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% of outcomes met at 75% or higher
Spring 2014	CIS 108	25	75%	100% of 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% of outcomes met at 75% or higher
Spring 2012 – Spring 2015	ENL 101	235	75%	71% of outcomes met at 75% or higher

On average, the outcomes of the program courses are met. No changes are required at this time. The performance of the students in courses and NOCTI's test will be monitored on annual bases.

**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 instructors. In the past four years, several Business Technologies instructors have received certification in Quality Matters. Additional certifications are expected for Business, IT, and General Education instructors in the near future. The college plans to apply Quality Matters standards to online and hybrid courses. The college is currently expanding its partnership with Potomac State College, Franklin University, Frostburg State University and West Virginia University.

The program is managed by an administrative faculty who holds a bachelor's degree in Economics, and three master's degrees in Business / Finance, Information Systems and Mathematics Education.

In fall 2012, Eastern hired a full-time business faculty who has been teaching some of the Accounting courses and has been helping with the assessment of the programs and courses.

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

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 usually costs more than \$250. The publishers no longer provide the older editions of these books. 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 or other online booksellers for less than \$30.

There is sufficient enrollment in related AAS programs to sustain the Accounting, Certificate in Applied Science. Courses like Spreadsheet Software and Computerized Accounting (QuickBooks) require the newest version of the software. The cost to upgrade QuickBooks is around \$1000 every two years. The spreadsheet software (Excel) is upgraded once every three years. The IT department absorbs this cost. This department also purchases licenses for the office suite for use by the entire institution.

## Summary of Assessment Model and Utilization for Program Improvement

The assessment of the Certificate in Accounting adheres to the guidelines established in Eastern's assessment plan to discern student academic achievement and course effectiveness in meeting the program goals and course outcomes.

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 a variety of assessments for students studying career and technical programs at technical colleges. Eleven Accounting students took the NOCTI test during a three-year period. Results revealed those students scored an average of 65.36 compared to the national average score of 66.4.

Accounting CAS Subscores													Eastern Average	NOCTI National Average	
2	BANNER Code	Title	2015	2015	2015	2015	2016	2016	2016	2016	2017	2017	2017		
3	F11A	Journalizing	89.2	65.4	80.8	65.4	30.8	46.1	65.4	61.5	69.2	84.6	57.7	69.28	66.5
4	F11B	Posting	44.4	66.7	72.2	55.6	50	55.6	38.3	72.2	72.2	66.7	72.7	60.65	65.6
5	F11C	Payroll Preparation	45.7	51.4	80	62.9	43.7	60	40	71.4	82.9	65.7	51.4	59.74	62.7
6	F11D	Cash and Banking Procedures	84.6	96.2	96.2	80.8	76.9	84.6	53.92	92.3	92.3	92.3	65.4	83.23	79.4
7	F11E	Merchandise Inventory	23.5	52.9	64.7	52.9	29.4	58.8	82.1	82.1	58.8	76.5	35.3	56.13	60
8	F11F	Completion of Accounting Cycle	44	52	68	60	40	36	64	88	60	72	44	57.09	60.9
9	F11G	Identification and Application of Data	87.5	37.5	87.6	75	37.5	62.5	62.5	75	62.5	100	65.5	68.46	74.9
10	F11H	Mechanical and Electrical Accounting I	70	60	80	80	70	80	80	70	80	80	80	75.45	76.9
11	F11I	Security	60	66.7	53.3	60	40	73.3	46.7	73.3	46.7	93.3	46.7	60.00	59.1
12	F11J	Basic Accounting Knowledge	64.3	85.7	100	64.3	50	85.7	57.1	85.7	85.7	100	64.3	76.62	74.1
13															
14	PF15	NOCTI Accounting Basic	59.2	64.4	78.1	65	46.9	61.9	56.7	77.1	72.7	80.4	56.2	65.36	66.4
15															

Measurement instruments administered each semester in all course sections with enrollment of six or more students include the IDEA Short Form Reports (i.e. course evaluation surveys). Measures of overall program success include course completion rates and student tracking studies.

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

In fall 2015, the College received approval as a testing site for Microsoft Office Specialist Certification. So far, three students attempted the MOS exam and two received the certification.



**Plans for program improvement, including timeline:**

The number of graduates of the CAS program is expected to remain at a constant rate of four students per year for the next five years. However, the quality of the program is expected to improve as Eastern expands its course and program assessment. Expectations indicate the program quality will improve as other related programs become more firmly established and as the college hires more instructors that are qualified.

Focusing on the industry certification, including MOS and computerized accounting certification can improve the quality of the program.

In 2018-2019 academic year, the college plans to apply for HLC’s approval to offer Business Management and Information Technology programs online. Upon approval, the college will be able to offer more Accounting courses in online format. Projections indicate this will result in an increase in enrollment. Expectations are the quality of the program will improve as the college recruits more students.

**Five-year trend data on graduates and majors enrolled:**

	<b>Headcount</b>	<b>FTE</b>	<b>Full-Time</b>	<b>Graduates</b>
Fall 2012	2	2.1	2	0
Spring 2013	3	3.1	3	1
Fall 2013	0	0	0	1
Spring 2014	2	1.4	1	0
Fall 2014	3	2.7	31	3
Spring 2015	2	1.6	2	4
Fall 2015	2	1.6	2	4
Spring 2016	2	1.6	2	2
Fall 2016	5	2.7	2	2
Spring 2017	4	3.5	4	5
<b>Total</b>	<b>25</b>	<b>20.3</b>	<b>49</b>	<b>22</b>

## **Graduates Profile (ACC CAS)**

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

- Five graduates - No information is available

Among the remaining seventeen graduates:

- All graduates (100%) have other degrees /certificates
- At least fourteen have jobs related to their field of study. Two graduates are not working, but are pursuing a Bachelor's Degree in Accounting through Franklin University.
- One completed a Bachelor's Degree in Accounting through Franklin University and a Master's Degree in Accounting through American Public University. This graduate is currently working for an accounting firm, and also teaches Accounting courses as a part-time instructor
- At least one is working on a RBA
- One completed an Associate Degree in Business Management at Eastern and transferred to Shepherd University
- All except two are females
- One moved out of state
  
- All graduates continued beyond the certificate level and completed at least one associate degree

### **Final recommendations approved by governing board.**

To better serve the needs of Eastern's six-county district, recommendations include to continue the program as offered in its current format with full-time day course implementation. It is further recommended to increase 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 program
- Engage part-time faculty in the assessment process

## Appendix I

### Accounting Certificate in Applied Science 30 Semester Hours

Upon successful completion of the Accounting Certificate in Applied Science, 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
- Analyze financial data
- Demonstrate effective communication and computational skills
- Demonstrate proficiency in computer applications
- Demonstrate a basic knowledge of business organization and procedures

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

#### Recommended Course Sequence: Accounting, Certificate 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	CIS	119	Spreadsheet Software	3
CIS	114	Introduction to Computer Applications and Concepts	3	Elective		Mathematics Elective (MTH 115 or higher)	3
ECN	201	Principles of Macroeconomics	3	Elective		Restricted Elective	3
ENL	101	English Composition I	3	Elective		Restricted Elective	3
<b>Total Semester Hours</b>			<b>15</b>	<b>Total Semester Hours</b>			<b>15</b>

#### Restricted Electives (Select 2 courses - 6 credit hours)

Dept.		Course Title	Sem. Hrs.
ACC	230	Income Tax Accounting	3
ACC	235	Managerial Accounting	3
ACC	240	Computerized Accounting	3
ACC	250	Intermediate Accounting I	3
ACC	251	Intermediate Accounting II	3
FIN	231	Business Finance	3
FIN	232	Personal Finance	3
MTH	115	Business Math	3

Students enrolled in this program may be eligible for related Skill Set Certifications. Students should contact their academic Advisor