

## Academic Program Proposals (MHEC) from Degree-Granting Institutions Authorized to Operate in Maryland

# Supply Chain Management, A.A.S.

### Contents

Academic Program Proposals (MHEC) from Degree-Granting Institutions Authorized to Operate in Maryland	1
A. Centrality to institutional mission statement and planning priorities	3
1. Program description	3
2. Program in relation to strategic plan and institutional priority	3
3. Program funding for the first 5 years	4
4. Institutional commitment	4
B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan	4
C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State	5
D. Reasonableness of Program Duplication	9
1. Similar programs	9
2. Program justification	9
E. Relevance to High-demand Program at Historically Black Institutions (HBIs)	9
1. Potential program impact on high demand programs at HBIs	10
F. Relevance to the Identity of Historically Black Institutions (HBIs)	10
1. Potential program impact on identities and missions of HBIs	10
G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10)	10
1. Program establishment and faculty involved	10
2. Educational objectives and learning outcomes	10
3. Program assessment in terms of student achievement and documentation	12
4. List of courses	12
5. General education requirements	20
6. Specialized accreditation or graduate certificate requirements	21
	1

7.	Scope of written contracts with other institutions	21
8.	Assurance and evidence to illustrate student needs	21
9.	Assurance and evidence regarding program advertising	22
H.	Adequacy of Articulation	22
I.	Adequacy of Faculty Resources	22
1.	Quality of program faculty	22
J.	Adequacy of Library Resources	27
K.	Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)	27
1.	Assurance regarding physical facilities, infrastructure, and equipment	27
2.	Assurance regarding distance education access in terms of institutional electronic mailing system and learning management system	28
L.	Adequacy of Financial Resources with Documentation	28
1.	Table 1: Resources	28
2.	Table 2: Expenditures	30
M.	Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15)	31
1.	Course evaluation procedures	31
2.	Institutional assessment of program effectiveness	31
N.	Consistency with the State’s Minority Student Achievement Goals (as outlines in COMAR 13B.02.03.05)	32
1.	Minority student needs	32
O.	Relationship to Low Productivity Programs Identified by the Commission	32
P.	Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)	32
1.	Affirmation of institutional distance education eligibility	32
2.	Assurance regarding C-RAC guidelines	33
Appendix A: Best Practices for HCC Online Courses		34
Faculty Presence		34
Start-Up Information & Navigation		34
Content		34
Active Learning		35
Assessment		35
Accessibility		35

## A. Centrality to institutional mission statement and planning priorities

### 1. Program description

Harford Community College (HCC) is proposing a new workforce degree program, an Associate of Applied Science in Supply Chain Management.

In addition to general education course requirements, the A.A.S. degree in Supply Chain Management consists of 42 credits of core curriculum that emphasize application, problem solving, critical thinking, and communication skills. Upon completion of the program, students will have completed lower-level general education requirements, supply chain management requirements, and other courses that map closely to the duties expected of someone employed in Supply Chain Management, including accounting, data science, and interpersonal communications. This program is a recommendation of the Business Curriculum Advisory Board of Harford Community College, the Susquehanna Workforce Network, and its development was funded through a Perkins Innovations Grant from the Maryland State Department of Education.

Harford Community College's mission reads, "Grow. Achieve. Inspire. Contribute." This new program helps students "Achieve" by providing a clear pathway to employment. The vision of Harford Community College states:

"Strive for:

- *Satisfaction*: Demonstrate excellence in all we do as measured by those we serve.
- *Completion*: Do what it takes for students to achieve their goals.
- *Success*: Prepare all constituents to make a positive impact and inspire change in the world."

This new program is essential to ensure that the college is striving for "Completion" and "Success." As stated above, this new proposed degree will allow students a more practical, seamless, and easily-identifiable pathway to ensure completion and success to reach their end goal.

### 2. Program in relation to strategic plan and institutional priority

The proposed program supports Strategy 1 of HCC's Strategic Plan, which states that HCC will "Establish relevant, flexible options for learning that respond to community needs for growth and prosperity." It also supports Strategy 2 which states that HCC will "Create an engaging and inclusive learning experience so ALL students can achieve their goals." The design and alignment of the new program enhances the curriculum, and also promotes goal completion by providing a clear pathway for students to reach their end-goal. This new program was proposed by and vetted through HCC's Business Curriculum Advisory Board, which consists of industry experts, representatives from transfer institutions, and former graduates of related business programs. The new program is proposed with the full support of the Business Curriculum Advisory Board.

### 3. Program funding for the first 5 years

The majority of courses required for the Supply Chain Management A.A.S. degree program already exist at HCC and are offered on a regular basis. Four new courses were developed specifically for this program to enhance the curriculum and ensure students are able to achieve the skills needed to be employed upon completion. These four courses will require an additional adjunct salary and fringe benefits to support the program, for a total added cost of \$13,063.07. The college intends to continue its operating budget for full-time and part-time faculty as well as faculty professional development. As program enrollment grows, related additional tuition and fee revenue will be allocated to the program.

### 4. Institutional commitment

Theresa B. Felder, Ph.D., president of Harford Community College, vigorously supports enhancing the educational opportunities available for students and aligning these opportunities to help students most easily achieve their end goal. HCC is committed to providing administrative, financial, and technical support for the proposed program. HCC is also committed to the continued offering of program courses in the future, allowing students who enroll in the program to complete it within a reasonable amount of time.

## B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

The Supply Chain Management A.A.S. degree program addresses several goals of the 2017-2021 Maryland State Plan for Postsecondary Education. Goal 2 (Success), Strategy 6, seeks to “[i]mprove the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements,” recommends the creation of “focused pathways” that “demonstrate the fastest way to get to an associate degree by taking specific courses in a specific sequence.” The proposed program creates a specific pathway for students seeking to earn a degree in Supply Chain Management. By creating this pathway, students are more likely to enroll in the correct degree pathway upon registration, instead of mistakenly choosing the incorrect pathway and then having to take additional courses to complete. As detailed in Section A(2), above, the proposed program was vetted through the Business Curriculum Advisory Board, which includes industry subject matter experts and representative from HCC’s largest transfer institutions.

Goal 2 (Success), Strategy 7, seeks to “enhance career advising and planning services and integrate them explicitly into academic advising and planning,” recommends opportunities for students to “explore a specific industry relevant to their academic program.” These recommendations are supported by the growing body of evidence that attainment is predicated upon a structured pathway whereby clear routes to completion are achieved through an alignment of general education and discipline-specific coursework. Whereas traditional programs delay discipline-specific and experiential courses for the third and fourth semesters, the proposed program requires students to complete discipline-specific courses each semester. Completing discipline-specific courses earlier in the

degree pathway will allow students to determine sooner in their education if they have chosen the correct pathway.

Goal 3 (Innovation), Strategy 9, “Strengthen and sustain development and collaboration in addressing teaching and learning challenges” encourages the incorporation of Open Education Resources (OER) into programs to offset the cost of college. The HCC OER initiative actively encourages, supports, and sustains the use of open educational resources and low-cost, accessible formats for all courses as appropriate without compromising quality of content. Introduction to Business (BA 101), Accounting Principles I and II (ACCT 101 & ACCT 102), Principles of Marketing (BA 203), Introduction to Supply Chain Management (SCM 101), and other business courses are currently part of a digital inclusive access model at the college. The Business and Applied Technology (BAT) division is fully committed to increasing student success through the use of open or low-cost materials when feasible and new Supply Chain Management course offering will also be part of the digital inclusive access program.

### C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

Transportation, Logistics & Cargo Security (TLC) is a component of the manufacturing supply chain. MSDE Postsecondary Labor Market Data dashboard illustrates that in all three years of reporting (2019-2021), the TLC program will lead to high-skill, high wage, in-demand careers.

These data are complemented by findings by the local Workforce Investment Board, the Susquehanna Workforce Network (SWN) publications, *Logistics: A Logical Segment Upon Which to Focus, A Susquehanna Region Industry Brief*, July 2020 (hereinafter referred to as “Logistics Brief”) and *Manufacturing: A Susquehanna Region Industry Brief*, June 2020 (hereinafter referred to as “Manufacturing Brief”).

Per the Logistics Brief, 5 of the 12 largest warehouses in the greater Baltimore area fall within the Susquehanna region. The Logistics Brief concluded that:

Distribution employment has grown much more quickly in the Susquehanna region than in the balance of Maryland. Between 2009 and 2014, logistics/distribution employment expanded at an average annual rate of 4.1 percent in the Susquehanna region compared to a growth rate of 0.4 percent statewide. Between 2014 and 2019, overall regional logistics/distribution employment grew only slightly faster than statewide logistics/distribution employment, but it still managed to expand rapidly in Cecil County. Cecil County logistics/distribution employment grew at an average annual rate of 7.8 percent between 2014 and 2019.

Importantly, unlike other regions in Maryland that focus on air and water transport, the Susquehanna region’s employment falls more in warehousing and storage, wholesale and ground transportation.

Exhibit 10. Susquehanna Region Logistics/Distribution Employment by Detailed Industry, 2019Q2

Industry	Stable Employment
Warehousing and Storage	3,395
Merchant Wholesalers, Nondurable Goods	1,684
Merchant Wholesalers, Durable Goods	1,541
Truck Transportation	1,516
Transit and Ground Passenger Transportation	597
Wholesale Electronic Markets and Agents and Brokers	445
Support Activities for Transportation	201
Water Transportation*	168
Couriers and Messengers	110
Air Transportation	22

Source: U.S. Bureau of Labor Statistics, LED Extraction Tool - Quarterly Workforce Indicators (QWI); Sage.

Notes: 1. Data are not seasonally adjusted (NSA). 2. Employment figures are the number of stable jobs: the number of jobs that are held on both the first and last day of the quarter with the same employer. 3. Some logistics/distribution industries are not represented above because the U.S. Bureau of Labor Statistics suppresses figures when they do not meet US Census Bureau publication standards.

\*Data for these industries may be distorted/fuzzed.

Average wages in TLC industry sector are mid to high.

Exhibit 12. Average Wages in the Susquehanna Workforce Region for Select Industries, 2019Q3

Industry	Avg. Hourly Wage*	Avg. Weekly Wage	Avg. Annual Wage*
<b>All Industries</b>	<b>\$25.70</b>	<b>\$1,028</b>	<b>\$53,456</b>
<b>Wholesale Trade</b>	<b>\$27.35</b>	<b>\$1,094</b>	<b>\$56,888</b>
Wholesale Electronic Markets and Agents and Brokers	\$36.88	\$1,475	\$76,700
Merchant Wholesalers, Durable Goods	\$29.08	\$1,163	\$60,476
Merchant Wholesalers, Nondurable Goods	\$24.53	\$981	\$51,012
<b>Transportation and Warehousing</b>	<b>\$21.73</b>	<b>\$869</b>	<b>\$45,188</b>
Water Transportation	\$49.48	\$1,979	\$102,908
Truck Transportation	\$28.73	\$1,149	\$59,748
Support Activities for Transportation	\$24.90	\$996	\$51,792
Postal Service	\$24.40	\$976	\$50,752
Couriers and Messengers	\$21.88	\$875	\$45,500
Warehousing and Storage	\$18.50	\$740	\$38,480
Transit and Ground Passenger Transportation	\$14.20	\$568	\$29,536
Air Transportation	\$9.78	\$391	\$20,332

Source: Maryland Workforce Exchange, Labor Market Statistics, Covered Employment and Wages Program; Sage. \*Assumes a 40-hour week worked year round. \*\*Wage data not available for the following transportation and warehousing industries: pipeline transportation; rail transportation; scenic and sightseeing transportation.

Employment is expected to grow at an annual rate of 0.8% through 2026.

Exhibit 13. Susquehanna Region – Projected Employment Growth in Select Industries, 2016-2026

Industry	2016	2026	2016-2026	
			Total Growth	Annual % Growth
<b>ALL INDUSTRIES</b>	<b>130,904</b>	<b>141,205</b>	<b>10,301</b>	<b>0.8%</b>
<b>Wholesale Trade</b>	<b>3,358</b>	<b>3,441</b>	<b>83</b>	<b>0.2%</b>
Wholesale Electronic Markets and Agents and Brokers	534	593	59	1.1%
Merchant Wholesalers, Durable Goods	1,422	1,442	20	0.1%
Merchant Wholesalers, Nondurable Goods	1,402	1,406	4	0.0%
<b>Transportation and Warehousing</b>	<b>7,222</b>	<b>8,340</b>	<b>1,118</b>	<b>1.4%</b>
Warehousing and Storage	4,845	5,881	1,036	2.0%
Truck Transportation	1,394	1,433	39	0.3%
Support Activities for Transportation	151	166	15	1.0%
Transit and Ground Passenger Transport	594	607	13	0.2%
Water Transportation	161	172	11	0.7%
Couriers and Messengers	68	72	4	0.6%
<b>Wholesale Trade + Transportation and Warehousing</b>	<b>10,580</b>	<b>11,781</b>	<b>1,201</b>	<b>1.1%</b>

Source: Maryland Department of Labor, Licensing and Regulation (DLLR), Workforce Region Industry Projections; Sage.

Exhibit 16. Susquehanna Region – Projected Employment Growth in Select Detailed Occupations, 2016-2026

Occupations	2016	2026	2016-2026	
			Total Growth	Annual % Growth
<b>ALL OCCUPATIONS</b>	<b>130,904</b>	<b>141,202</b>	<b>10,298</b>	<b>0.8%</b>
<b>OCCUPATIONS LIKELY TO BE EMPLOYED IN LOGISTICS/DISTRIBUTION*</b>				
Hand Laborers and Freight, Stock, and Material Movers	3,445	4,156	711	1.9%
Stock Clerks and Order Fillers	3,068	3,379	311	1.0%
General and Operations Managers	2,032	2,187	155	0.7%
Industrial Truck and Tractor Operators	440	572	132	2.7%
Heavy and Tractor-Trailer Truck Drivers	1,543	1,669	126	0.8%
Shipping, Receiving, and Traffic Clerks	908	1,014	106	1.1%
Light Truck or Delivery Services Drivers	709	781	72	1.0%
Customer Service Representatives	635	692	57	0.9%
Hand Packers and Packagers	432	486	54	1.2%
Wholesale and Manufacturing Sales Representatives**	652	697	45	0.7%

Source: Maryland Department of Labor, Licensing and Regulation (DLLR), Workforce Region Occupational Projections; Sage.

Notes: \*Top 10 growing occupations in the Susquehanna region out of the 20 occupations representing the largest share of Wholesale Trade (NAICS 42) employment and the 20 occupations representing the largest share of Transportation and Warehousing (NAICS 48-49) employment, nationwide in 2018. \*\*Except Technical and Scientific Products.

Per the Manufacturing Brief, manufacturing in the region is expected to continue to grow with a concurrent, increasing demand for employees. Below are job protections for occupations within the manufacturing sector, several of which fall within the TLC industry sector.

Exhibit 13. Susquehanna Region – Projected Employment Growth in Select Detailed Occupations, 2016-2026

Occupations	2016	2026	2016-2026	
			Total Growth	Annual % Growth
<b>ALL OCCUPATIONS</b>	130,904	141,202	10,298	0.8%
<b>OCCUPATIONS LIKELY TO BE EMPLOYED IN MANUFACTURING*</b>				
Hand Laborers and Freight, Stock, and Material Movers	3,445	4,156	711	1.9%
General and Operations Managers	2,032	2,187	155	0.7%
Industrial Truck and Tractor Operators	440	572	132	2.7%
General Maintenance and Repair Workers	1,194	1,324	130	1.0%
Heavy and Tractor-Trailer Truck Drivers	1,543	1,669	126	0.8%
Shipping, Receiving, and Traffic Clerks	908	1,014	106	1.1%
Industrial Machinery Mechanics	433	501	68	1.5%
Customer Service Representatives	635	692	57	0.9%
Hand Packers and Packagers	432	486	54	1.2%
Industrial Engineers	467	513	46	0.9%

Source: Maryland Department of Labor, Licensing and Regulation (DLR), Workforce Region Occupational Projections; Sage.

Notes: \*Top 10 growing occupations in the Susquehanna region out of the 50 occupations representing the largest share of manufacturing (NAICS 31-33) employment nationwide in 2019.

The Manufacturing Brief concludes that “the lack of qualified manufacturing workforce persisted into 2020. While there are facially sufficient numbers of jobseekers, these jobseekers frequently lack the skills necessary to take on the requirements of open positions.”

The Manufacturing Brief and Logistics Brief informed SWN’s Local Plan. SWN, in its *Local Plan* dated January 2021, determined that Trade, Transportation & Utilities accounted for more than 22% of employment in the region. The regional Employment Location Quotient for this industry sector is 1.27, outpacing national averages. Since 2013 this sector’s employment grew at a rate of 7.8%. SWN also indicated that “[p]resently, jobs in logistics related to the e-commerce revolution, a revolution that has likely gathered additional momentum due to the novel coronavirus, are supplying significant numbers of opportunities for jobseekers.” Warehousing and storage jobs in the region are expected to grow annually by 2% through 2026. Based upon this data, during the 2020-2024 period, SWN’s focus will be to support credentialing opportunities associated with manufacturing, distribution and logistics, among other areas of employment.

HCC’s Perkins Citizens Advisory Committee convened on September 9, 2021 and discussed the need for TLC educational programs. The committee affirmed the need for such a program in the region, endorsed HCC’s creation of a TLC pathway, and also recommended inclusion of non-credit short term industry certifications in the TLC program pathway.

While HCC offers non-credit programming to support the manufacturing, warehousing, distribution and logistics employers for entry-level, lower-skilled jobs, it does not presently offer a degree or certification program to support careers as brokers, clerks, transportation managers, route planners, physical



distribution managers, distribution planning analysts, and transportation marketers and operations managers.

## D. Reasonableness of Program Duplication

### 1. Similar programs

Supply Chain Management program offerings are limited to only three other community colleges in Maryland. The table below includes information on the programs offered at those three community colleges:

Business Management Program Offerings at Other Maryland Community Colleges	
College	Business Management Program Information
Cecil	Supply Chain Management (AAS & Certificate), Transportation Logistics and Management (AAS)
BCCC	Transportation and Supply Chain Management (AAS & Cert)
AACC	Transportation, Logistics, and Cargo Security (Cert), Supply Chain Management (Business Management Concentration) (AAS & Cert)

In reviewing related programs, it appears HCC’s proposed program varies significantly to those offered by sister institutions. Both the AACC and Cecil College programs focus more heavily on Business Management topics, offering only a few courses specific to Supply Chain Management. The program offered by BCCC focuses heavily on maritime transportation and logistics. While HCC’s program touches on maritime transportation and logistics, the focus is more heavily on warehousing, technology, and ground transportation..

### 2. Program justification

Based on the analysis of offerings at other community colleges, it appears the growing workforce need of the area discussed above cannot be satisfied with programs offered by sister institutions. This proposed program is absolutely vital to the growing need of the local / regional workforce related to logistics and supply chain management.

## E. Relevance to High-demand Program at Historically Black Institutions (HBIs)

### 1. Potential program impact on high demand programs at HBIs

The proposed program builds a new pathway to workforce for entry-level supply chain management positions. This new pathway will have no impact on surrounding Historically Black Institutions.

## F. Relevance to the Identity of Historically Black Institutions (HBIs)

### 1. Potential program impact on identities and missions of HBIs

The proposed program will not have any impact on the uniqueness or institutional identity of surrounding HBIs.

## G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10)

### 1. Program establishment and faculty involved

The Supply Chain Management A.A.S. degree program was developed by faculty in accordance with the College's Curriculum Manual and included assessment of data to support enrollment, consultation with other divisions, analysis of career projections, and approvals from BAT Division faculty, the curriculum workgroup, the Vice President of Academic Affairs, the President of the College, and the Board of Trustees.

### 2. Educational objectives and learning outcomes

This multi-disciplinary curriculum provides a foundation for a career in Supply Chain Management.

There are six program learning outcomes (LOs) for the proposed Supply Chain Management program. Upon successful completion of this program of study students will be able to:

1. Assess the dynamics of the supply chain in the global marketplace.
2. Describe the nature of supply chain workflows and processes.
3. Identify the concepts of supply chain logistics in business practices.
4. Evaluate the impact of international business and other emerging issues on the global supply chain.
5. Analyze the various functional areas of the supply chain process.
6. Analyze the use and importance of information technology systems in each of the functional areas of the supply chain process.

Assessment of student program learning outcomes considers respective course learning objective outcomes inclusive of summative, formative and informative assessment data. Outcomes are collected and documented using a learning management system- integrated software solution.

The following recommended list of program courses demonstrates how General Education requirements will be met and maps courses to Supply Chain Management program learning outcomes. General education courses are italicized.

<b>Course</b>	<b>Credits</b>	<b>Program LOs</b>
(Credit) (General Education[1] or HCC Graduation Requirement)		
<b>Required Business Management Core Curriculum</b>		
<i>BA 101, Introduction to Business (GI)</i>	3	3, 4
BA 203, Principles of Marketing	3	1, 4
BA 210, Business Computer Applications Or CIS 102, Intro to Information Sciences (GI)	3	6
BA 242, Intro to International Business	3	1, 4, 5
ACCT 101, Accounting Principles I	3	5
ACCT 102, Accounting Principles II	3	5
SCM 101, Intro to Supply Chain Management	3	1, 2, 3, 4, 5
SCM 102, Information Systems in Supply Chain Management	3	3, 5, 6
SCM 103, Inventory Management	3	2, 3, 5
SCM 204, Transportation in Supply Chain Management	3	1, 2, 3, 5
SCM 205, Warehousing and Distribution Center Solutions	3	1, 2, 3, 5
SCM 206, Optimizing Distribution Networks	3	1, 3, 4, 5
<i>ENG 101, English Composition (GE)</i>	3	2
<i>CMST 105, Interpersonal Communication (GI) (D)</i> <i>Or CMST 101, Speech Fundamentals (GI)</i> <i>Or CMST 210, Group Communication and Leadership (GH)</i>	3	2
DSCI 101, Intro to Data Science	3	5, 6
<i>Behavioral / Social Science General Education Elective (GB)</i>	3	2
<i>Biological / Physical Lab Science General Education Elective (GL)</i>	4	2
<i>Arts / Humanities General Education Elective (GH)</i>	3	2
<i>Mathematics General Education Elective (GM)</i>	3	5, 6
Physical Education Elective (PE)	2	
<b>Total Credits</b>	<b>60</b>	

[1]All students must meet specific General Education requirements within their associate degree programs. To be eligible for the Associate of Arts (AA) degree, the Associate of Science (AS) degree, or the Associate of Arts in Teaching (AAT) degree, students must complete a minimum of 60 credits of college-level work. Of the 60 credits, 28-36 credits must fulfill the College's General Education core requirements.

### 3. Program assessment in terms of student achievement and documentation

Assessment of student program learning outcomes will be performed throughout the core courses, including accounting (ACCT), business administration (BA), and supply chain management (SCM) courses, as well as others. Formative, summative and authentic assessments will be used. Outcomes are collected and documented using a learning management system-integrated software solution. The learning management system-integrated software solution allows for documentation of individual course learning outcomes as well as program goal achievement. All course learning outcomes are assessed every four years per HCC's recommendations. Course assessments roll-up into program assessments which occur on a four-year cycle as well.

### 4. List of courses

#### **BA 101: Introduction to Business | 3 credits**

*Program Requirement; General Education: Interdisciplinary and Emerging Issues (GI)*

*Program Goals: 3, 4*

This course introduces students to the American private enterprise system and the forms of businesses that operate within it. Students study the role of business in American society, international business activity, the impact of ethics and social responsibility on business, entrepreneurship and small business, and emerging trends in technology, organization, and management. Topics covered include economics, management, marketing, accounting, and financial management.

Upon satisfactory completion of this course, the student will be able to:

- 1) Analyze and assess the private enterprise system in the United States, and compare and contrast it to other world economic systems.
- 2) Identify the concepts of social responsibility and business ethics and describe how they affect business practices.
- 3) Describe the nature of entrepreneurship and the process and options involved in starting a small business.
- 4) Analyze and describe the various functional areas of business – accounting, finance, management, and marketing.
- 5) Analyze the use and importance of computers and information technology in each of the functional areas of business and in the conduct of business.
- 6) Evaluate the impact of international business on the economy of the United States.

- 7) Evaluate the impact of evolving and emerging issues on business practices.
- 8) Define key business terms and use the language of business.

### **BA 203: Principles of Marketing | 3 credits**

*Program Elective*

*Program Goals: 1, 4*

Students are introduced to fundamental marketing concepts and techniques related to product, pricing, distribution and promotional strategy. Students explore trends in the marketplace and identify opportunities for creating value for customers through marketing strategy.

Upon satisfactory completion of this course, the student will be able to:

- 1) Identify and explain the controllable and uncontrollable factors and their importance in the domestic and international marketing environment.
- 2) Define e-commerce and give examples of various function of the Internet as they relate to e-commerce.
- 3) Define marketing research and the process involved.
- 4) Discuss the consumer, both final and organizational, and the methods for identifying a target market.
- 5) Explain each step of the product planning process: all the steps from new product creation to the deletion of unsatisfactory products.
- 6) Discuss distribution planning, physical distribution, wholesaling and retailing.
- 7) Describe the promotion planning process and the creation of the elements of promotion: advertising, publicity, personal selling and sales promotion.
- 8) Develop a price strategy.

### **BA 210: Business Computer Applications | 3 credits**

*Program Requirement*

*Program Goals: 6*

This course introduces the student to the uses of the PC for analysis, critical thinking, problem solving, electronic data management and for the reporting/presentation of results. Business, accounting, and financial problems and application are emphasized. Students develop competence with word processor, data base, spreadsheet, charting, graphics and communication tools in a visually-oriented computing environment. Integration of the tools or packages is emphasized.

Upon satisfactory completion of this course, the student will be able to:

- 1) Use computers and other technology as appropriate.
- 2) Apply computational skills to solve problems.
- 3) Use the Windows file management techniques to: manage disks and files created with the word processor, data base or spreadsheet tools; prepare reports using the text handling capabilities of word processors; develop spreadsheet models and charts to solve problems, interpret and present numerical and graphical data.

- 4) Organize, manage and use information or data effectively using an electronic database.
- 5) Combine the separate productivity tools/packages (integration) for increased power in solving business problems.
- 6) Demonstrate basic proficiency with presentation software and recognize when information is needed and have the ability to locate, evaluate, store and use effectively using the computer.

**BA 242: Intro to International Business | 3 credits**

*Program Requirement*

*Program Goals: 1, 4, 5*

In this introductory course in international business, the student acquires an overview of current international business patterns, different social systems within countries as they affect trade, and the major theories which explain how trade develops. The student is also introduced to material about how institutions, countries and individual corporate strategy are affected by trade patterns. Prerequisite: BA 101 or permission of instructor.

Upon satisfactory completion of this course, the student will be able to:

- 1) Analyze the dynamics of a global marketplace.
- 2) Define national differences in the political, legal and economic systems.
- 3) Describe the process involved with starting, financing and structuring a business.
- 4) Compare and contrast values, norms and cultural differences.
- 5) Identify the concepts of global ethics and social responsibility and describe how they affect business practices.
- 6) Describe the role of international business, the challenges and opportunities for this environment.
- 7) Describe and identify global trade and investment environments.
- 8) Describe and identify challenges with global markets.

**ACCT 101: Principles of Accounting I | 3 credits**

*Program Elective*

*Program Goals: 5*

This course is an introduction to accounting theory and practice with an emphasis on accounting for assets. The complete accounting cycle is presented and end-of-period financial reports are prepared.

Upon satisfactory completion of this course, the student will be able to:

- 1) The student will be able to apply the generally accepted accounting principles and techniques to the process of analyzing and recording financial data.
- 2) The student will be able to prepare the end of period financial statements for service and merchandising enterprises.
- 3) The student will be able to demonstrate an understanding in greater depth of accounting for assets, current liabilities, and payroll.

**ACCT 102: Principles of Accounting II | 3 credits**

*Program Requirement*

*Program Goals: 5*

This course focuses on accounting for the corporate form of organization. Emphasis is placed on the corporate capital structure, investments, liabilities, the cash flow statement, budgeting and managerial accounting for costs.

Upon satisfactory completion of this course, the student will be able to:

- 1) Apply the generally accepted accounting principles and techniques in recording business transactions pertaining to corporations.
- 2) Prepare and analyze corporate financial statements.
- 3) Apply generally accepted accounting principles and techniques in recording transactions pertaining to current and long-term debt.
- 4) Account for costs under both job order and process cost accounting systems.
- 5) Perform basic cost/volume/profit analysis.
  
- 6) Apply budgeting techniques in preparing both Master and Flexible budgets.

**SCM 101: Intro to Supply Chain Management | 3 credits**

*Program Requirement*

*Program Goals: 1, 2, 3, 4, 5*

This course introduces students to the role of supply chain management in the global economic system. Students examine the role of supply chain components, logistics concepts, warehousing practices and distribution management.

Upon satisfactory completion of this course, the student will be able to:

- 1) Assess the dynamics of supply chain in the global marketplace.
- 2) Identify the concepts of supply chain logistics and business practices.
- 3) Analyze and describe the various functional areas of the supply chain process – network components, technology, competitive landscape, global marketplace, and the impact on marketing.
- 4) Analyze the use and importance of systems and information technology in each of the functional areas of the supply chain.
- 5) Evaluate the impact of international business on the global supply chain.
- 6) Define key supply chain terms and use the language of business.

**SCM 102: Information Systems in Supply Chain Management | 3 credits**

*Program Requirement*

*Program Goals: 3, 5, 6*

This course introduces students to the technology applications and the role of supply chain logistics in e-commerce. Students study the role of supply chain logistics in the global marketplace, and emerging trends in technology, organization, and management. Topics covered include Supply Chain performance measurement, demand management, transportation, inventory management, global logistics, and financial supply chain management.

Upon satisfactory completion of this course, the student will be able to:

- 1) Define the main functional areas of supply chain operations and the technology used in e-commerce.
- 2) Differentiate between business processes and business functions.
- 3) Identify the data each supply chain functional area produces.
- 4) Use data within each supply chain management functional area to support supply chain operations.
- 5) Define integrated information systems and explain why they are essential in today's globally competitive business environment.

### **SCM 103: Inventory Management | 3 credits**

*Program Requirement*

*Program Goals: 2, 3, 5*

This course introduces students to inventory asset management techniques and the impact on the supply chain logistics in e-commerce. Students study the role of supply chain logists in the global marketplace, emerging trends in inventory management technology, and financial management techniques. Topics covered include inventory analysis, performance measurement, demand management, cycle time techniques, inventory optimization, and impact of financial supply chain management. Prerequisite: SCM 101.

Upon satisfactory completion of this course, the student will be able to:

- 1) Define the main functional areas of supply chain operation processes and the technology used in e-commerce business.
- 2) Apply physical inventory techniques and cycle count processes utilizing supply chain technology.
- 3) Identify types of data each each main inventory functional area produces.
- 4) Analyze data within each main functional area to support supply chain operations.
- 5) Define integrated information ERP systems and explain why they are essential in today's globally competitive business environment.

### **SCM 204: Transportation in Supply Chain Management | 3 credits**

*Program Requirement*

*Program Goals: 1, 2, 3, 5*

This course introduces students to the transportation options and the role of supply chain logistics in e-commerce. Students study the role of supply chain transportation logistics in the global marketplace. Topics covered include Supply Chain transportation performance measurement, transportation optimization, transportation alternatives, global logistics, and financial supply chain management. Prerequisite: SCM 101.

Upon satisfactory completion of this course, the student will be able to:



- 1) Define the alternative modes of transportation and their impact on the supply chain operation processes and technology used in e-commerce business.
- 2) Differentiate various modes of transportation and logistics processes.
- 3) Analyze transportation optimization solutions available in supply chain logistics.
- 4) Analyze transportation data needed to support supply chain operations.
- 5) Define integrated information systems and explain why they are essential in today's globally competitive business environment.

### **SCM 205: Warehousing and Distribution Center Solutions | 3 credits**

*Program Requirement*

*Program Goals: 1, 2, 3, 5*

This course examines the importance of warehousing, customer service, and how a company can use it to provide a competitive edge. Students study the role of product warehousing and distribution in the global marketplace, and emerging trends related to distribution centers. Topics covered include facility layout and design, space utilization, order pick pack processes, material handling and storage, and operational best practices. Prerequisite: SCM 101.

Upon satisfactory completion of this course, the student will be able to:

- 1) Identify how manual warehouse and supply chain processes can be automated to enhance effectiveness and efficiency of the supply chain.
- 2) Differentiate various methods of pick / pack processes and order management.
- 3) Identify the various kinds of materials handling equipment used in warehouse operations.
- 4) Utilize Labor Management Systems in a modern warehouse operation.
- 5) Analyze optimization techniques used to streamline and improve the flow of goods and information through the supply chain.

### **SCM 206: Optimizing Distribution Networks | 3 credits**

*Program Requirement*

*Program Goals: 1, 3, 4, 5*

This course introduces students to the process of evaluating and optimizing the network of distribution centers in supply chain logistics. Students study the role of supply chain distribution center through-put costs, handling costs, and transportation logistics in the global Supply Chain. Topics covered include Supply Chain distribution center performance measurement, transportation optimization, global logistics, and financial supply chain management. Prerequisite: SCM 101.

Upon satisfactory completion of this course, the student will be able to:

- 1) Define the concepts in supply chain optimization of distribution networks.
- 2) Differentiate various modes of transportation and the impact of network locations.
- 3) Analyze inbound and outbound transportation optimization cost solutions.
- 4) Define integrated transportation information systems and explain why they are essential in today's globally competitive business environment.

**CIS 102: Intro to Information Sciences | 3 credits**

*Program Elective; General Education: Interdisciplinary and Emerging Issues (GI)*

*Program Goals: 6*

This is a survey course of the characteristics, functions and applications of computers. It includes the concepts and principles of problem solving and computer programming. Emphasis is placed on microcomputers and application software packages, such as word processors, spreadsheets, and graphics. Course fee.

Upon satisfactory completion of this course, the student will be able to:

- 1) Identify the major developments in computer hardware and software.
- 2) Describe the characteristics, functions and limitations of processors, storage media and peripherals.
- 3) Describe the difference between developing computer programs and using software packages.
- 4) Analyze the reasons for using computer languages and software packages given their characteristics and limitations.
- 5) Discuss the complexity of global communication and the effect of computers in the international community.
- 6) Evaluate computer systems that satisfy given constraints.
- 7) Access, use, and exit word processing, spreadsheet, presentation graphics, database and operating system software, and produce a report, a spreadsheet, and a graphic presentation.

**ENG 101: English Composition | 3 credits**

*Program Requirement; General Education: English Composition (GE)*

*Program Goals: 2*

This course is designed to develop mature writing skills in the essay form, including the documented essay. Through writing a series of essays in a variety of modes, such as argumentative essay, the process analysis, the research paper, and the summary analysis, students achieve proficiency in presenting and supporting their own ideas and incorporating the ideas of others into their essays.

Upon satisfactory completion of this course, the student will be able to:

- 1) Write unified papers. This objective involves the development of a purposeful organization pattern based on a clearly stated, well-focused, and worthwhile thesis statement, which is firmly adhered to in the essay.
- 2) Write coherent papers. This skill involves providing transitions between ideas and in other ways showing relationships between parts of the essay.
- 3) Provide support. This objective involves giving sufficient specific evidence to convince the reader of the validity of the thesis.
- 4) Communicate rationally. This objective involves the use of basic principles of logic.
- 5) Construct sentences that are grammatically and mechanically correct.
- 6) Use language accurately and concisely.

- 7) Collect, use, and document evidence from sources other than personal experience, including written sources.

**CMST 101: Speech Fundamentals | 3 credits**

*Program Elective; General Education: Interdisciplinary and Emerging Issues (GI)*

*Program Goals: 2*

Students develop skills in this performance-based course of public communication concepts and techniques, including audience analysis, topic selection and research, organization of speech materials, delivery skills, and critical evaluation of speeches.

Upon satisfactory completion of this course, the student will be able to:

- 8) Demonstrate the principles of effective public speaking communication.
- 9) Demonstrate the principles of effective speech preparation and delivery.
- 10) Demonstrate the ability to locate, evaluate, document, and use effectively the needed information from a variety of courses and formats.
- 11) Present three extemporaneous speeches and one impromptu speech meeting the criteria specified in class lecture/discussion, handouts and activities.
- 12) Demonstrate ethical speaking and listening practices.
- 13) Provide constructive written and oral feedback to fellow students.

**CMST 105: Interpersonal Communications | 3 credits**

*Program Elective; General Education: Interdisciplinary and Emerging Issues (GI)*

*Program Goals: 2*

This course explores the basic elements and theories of interpersonal communication and provides students with the foundation for effective dyadic communication skills to establish and maintain personal and professional relationships. Culture and its influence on communication are highlighted throughout the course. Students are provided opportunities to refine their interpersonal communication skills through role-plays and other activities.

Upon satisfactory completion of this course, the student will be able to:

- 14) Demonstrate the basic principles and concepts of interpersonal communication.
- 15) Demonstrate an increased awareness of the self in the communication process.
- 16) Identify and analyze his/her own communication strengths and weakness.
- 17) Expand individual interpersonal communication skills, styles, and strategies.
- 18) Communicate without sexism, heterosexism, or racism.
- 19) Communicate in intercultural situations with cultural sensitivity and effectiveness.
- 20) Evaluate ethical issues as they relate to interpersonal communication.
- 21) Analyze and evaluate interpersonal messages, techniques, and outcomes.

**CMST 210: Group Communication and Leadership | 3 credits**

*Program Elective; General Education: Arts & Humanities (GH)*

*Program Goals: 2*

This course examines issues of physical and virtual teamwork. The course challenges students' understanding of their leadership competence and conflict resolution skills. Students explore the relationships among members, the processes they use, and the purposes for which they are together. Prerequisite: ENG 012, ENG 018, ENG 060 or a qualifying score on the writing assessment.

Upon satisfactory completion of this course, the student will be able to:

- 1) Examine theory and research in small group/team communication as it relates to the enhancement of communication skills.
- 2) Explore the functions of communication in small group settings.
- 3) Examine and assess participation in groups and teams, and experiment and improve upon those behaviors.
- 4) Apply techniques for managing conflict and reaching consensus in small groups.
- 5) Manage effective group leadership and participation.

### **DSCI 101: Intro to Data Science | 3 credits**

*Program Elective*

*Program Goals: 5, 6*

The course provides students with a survey of both theoretical and practical aspects in the field of data science. Course topics include an overview of the data science field, data manipulation and flow, artificial intelligence and machine learning, testing, sorting, preparing and cleaning data sets, and cross-validation. Students will develop skills in relevant programming and scripting languages such as R and Python and be able to make inferences using results from data summaries.

Upon satisfactory completion of this course, the student will be able to:

- 1) Define data science and describe the current and emerging roles of data science in society.
- 2) Obtain, sort, clean, and transform data sets.
- 3) Develop programs and scripts in R and Python to manipulate data.
- 4) Summarize and communicate findings and inferences from data operations.

## **5. General education requirements**

HCC students must complete a minimum of 60 credits of college-level work to be eligible for the Associate of Applied Science degree. In accordance with COMAR 13B.06.01.03, of the 60 credits, 18 - 19 credits must fulfill HCC's General Education requirements as follows:

- 3 credits of Behavioral/ Social Sciences (GB)
- 3 credits of English Composition (GE)
- 3 credits of Arts/ Humanities (GH)
- 4 credits of Biological/ Physical Laboratory Science (GL)
- 3 - 4 credits of Mathematics (GM)
- 2 credits of General Education Electives (GB, GH, GM, GS, GI)

The proposed Supply Chain Management A.A.S. degree meets these General Education requirements as follows:

General Education Area	Course	Credits
Behavioral/ Social Sciences	Behavioral/Social Science Elective (GB)	3
English Composition	ENG 101 (GE)	3
Arts/Humanities	Arts/Humanities Electives (GH)	3
Biological/ Physical Laboratory Science	Biological/Physical Laboratory Science Elective (GL)	4
Mathematics	Mathematics Elective (GM)	3
General Education Electives	BA 101 (GI); CMST 105 (GI)(D) or CMST 101 (GI)	6
<b>Total General Education Credits Contained in Proposed Program:</b>		<b>22</b>

#### 6. Specialized accreditation or graduate certificate requirements

There are no specialized accreditation or graduate certificate requirements for this program.

#### 7. Scope of written contracts with other institutions

There are no contracts with other institutions associated with this program.

#### 8. Assurance and evidence to illustrate student needs

Following a 2017 comprehensive review of business processes, HCC has begun implementation of projects designed to enhance the student experience. Improvements to workflow will provide students with clear, complete, and timely information. For example, the adoption of catalog and curriculum software that integrates with both the current Enterprise Resource Planning (ERP) solution and the degree-auditing and tracking tool will provide students with transparent, real time information regarding curriculum, course and degree requirements.

HCC regards faculty interactions with the student body as paramount to academic success. All full time faculty maintain at least five reasonably distributed office hours per week when the faculty member's courses are in session. Office hours are posted in the syllabus, on office doors and in the learning management system.

Assumptions about technology competence and skills and technical equipment requirements are stated in the College's course catalog, as well as course descriptions and degree requirements.

All HCC courses are required to use Blackboard to provide links to academic support services, financial aid resources, and college policies regarding tuition costs and payment regardless of instructional delivery mode.

The Office of Communications is committed to providing transparent and accurate advertising, recruiting, and admissions materials through ongoing processes. When a new degree program is approved, it will be advertised in several ways. A headline banner will be put on the official HCC website and listed under the degree programs offered at HCC. An article will be written about the new program and a news release will be put in the local papers, included in the weekly newsletter distributed campus-wide, as well as the *Harford Highlights*, a newsletter accessible to community members. Other advertising includes social media communications as well as brochures given out at open houses both at HCC and local high schools.

## 9. Assurance and evidence regarding program advertising

Harford Community College's Office of Communications generates promotional materials for academic programs that are used in advertising, recruiting, and admission. Office of Communications staff work closely with staff in Academic Affairs and Student Affairs & Institutional Effectiveness to ensure the accuracy of promotional materials. An annual review process of program brochures has been established to coincide with the release of each academic catalog, as well as a line of communication for any programmatic changes that may occur outside of the annual review cycle.

## H. Adequacy of Articulation

The Associate of Applied Science in Supply Chain Management is designed to prepare students for employment. The program is not a transfer degree. The proposed program was reviewed by both University of Baltimore and Towson University during development and potential articulation agreements are being explored for interested students.

## I. Adequacy of Faculty Resources

### 1. Quality of program faculty

Harford Community College employs highly qualified faculty in all disciplines. Additionally, through the Center for Excellence in Teaching and Learning (CETL), the College offers comprehensive professional development and training for all who are engaged in the teaching and learning process at HCC. CETL is intentionally designed to be a hub both digitally and physically for innovation, collaboration, and learning transformation through a variety of events and resources in order to:

- Create faculty teaching and learning communities of practice;
- Celebrate innovation in instruction and scholarship;
- Offer on-going basic and advanced learning management system training;
- Provide resources, facilities and technology to foster experimentation; and

- Offer opportunities for faculty to gain additional knowledge and hone skills related to technology and pedagogy.

All distance learning courses are reviewed through a collaborative internal review process based upon standards developed at the College through the shared governance process and approved by Faculty Council. Per Appendix A, Best Practices for HCC Online Courses, faculty are required to employ evidence-based practices in course design.

Full-time and adjunct Accounting and Business faculty have graduate degrees in Business or Accounting and professional experiences in a variety of business and educational settings.

The following identifies faculty engaged in this program:

*Jessica Adams*

Associate Professor of Mathematics  
B.S., University of Delaware  
M.S., Johns Hopkins University  
M.S., Notre Dame of MD University

General Education Math

*David Antol*

Coordinator for Applied Technology Programs  
B.S., Tri-State University  
M.S., Loyola University of Maryland

BA 210 – Business Computer Applications; CIS 102 – Introduction to Information Sciences

*L.J. Baker*

Assistant Professor of Accounting  
Business Program Coordinator  
B.S., University of Baltimore  
M.S., University of Maryland University College

ACCT 101 – Principles of Accounting I; ACCT 102 – Principles of Accounting II; BA 210 – Business Computer Applications

*John Bray*

Assistant Professor of Mathematics  
B.S., University of Scranton  
M.S., Pennsylvania State University

General Education Math

*Mark Brock-Cancellieri*

Assistant Professor of English  
B.A., Mary Washington College

M.A., University of New Orleans

ENG 101 – English Composition

*Maurice Brown*

Assistant Professor of Business

B.A., Towson University

M.B.A., University of Baltimore

BA 101 – Introduction to Business; BA 203 – Principles of Marketing; BA 210 – Business Computer Applications; BA 242 – Intro to International Business

*Dr. Reba Businsky*

Assistant Professor of Business

B.S., Goldey Beacom College

M.S., Wilmington University (HR Management)

M.S., Wilmington University (Transportation & Business Logistics)

PhD., Walden University

BA 101 – Introduction to Business; SCM 101 – Intro to Supply Chain Management; SCM 102 – Information Systems in Supply Chain Management; SCM 103 – Inventory Management; SCM 204 – Transportation in Supply Chain Management; SCM 205 – Warehousing and Distribution Center Solutions; SCM 206 – Optimizing Distribution Networks

*Michele Catterton*

Assistant Professor of Mathematics

B.S., Towson University

M.S., McDaniel College

General Education Math

*Abigail Chapin*

Assistant Professor of Computer Programming

B.S., University of Maryland

M.S., University of Virginia

CIS 102 – Introduction to Information Sciences

*Mark Dencler*

Assistant Professor of Computer Programming

B.S., Towson University

M.S., Towson University

CIS 102 – Introduction to Information Sciences



*Cynthia Gribbin*

Assistant Professor of Communication Studies  
B.A., University of Maryland, College Park  
M.A., Notre Dame of Maryland University

CMST 105 – Interpersonal Communication; CMST 101 – Speech Fundamentals; CMST 210 – Group Communication and Leadership

*Linda Heil*

Adjunct Professor of Communication Studies  
B.S., Towson University  
M.S., Towson University  
G.C.E.R.T., University of Maryland-University College

CMST 105 – Interpersonal Communications; CMST 101 – Speech Fundamentals; CMST 210 – Group Communication and Leadership

*Chris Jones*

Professor of Mathematics  
B.S., Towson University  
M.S., Towson University

General Education Math; DSCI 101 – Intro to Data Science

*Brian Lazarus, CPA*

Assistant Professor of Business  
B.S., Towson State University  
M.B.A., University of Baltimore

BA 101 – Introduction to Business; BA 203 – Principles of Marketing; BA 242 – Intro to International Business; ACCT 101 – Accounting Principles I; ACCT 102 – Accounting Principles II

*Cynthia Lewis*

Associate Professor of Accounting  
B.S., University of Baltimore  
M.S., University of Maryland University College

ACCT 101 – Principles of Accounting I; ACCT 102 – Principles of Accounting II; BA 101 – Introduction to Business; BA 203 – Principles of Marketing

*David Literello*

Director for Workforce Development, Adjunct Business Faculty  
B.B.A, Iona College  
M.B.A., New York Institute of Technology

BA 101 – Introduction to Business; SCM 101 – Intro to Supply Chain Management; SCM 102 – Information Systems in Supply Chain Management; SCM 103 – Inventory Management; SCM 204 –

Transportation in Supply Chain Management; SCM 205 – Warehousing and Distribution Center Solutions; SCM 206 – Optimizing Distribution Networks

*Dr. Tammira Lucas*

Assistant Professor of Business  
B.S., Coppin State University  
M.B.A., Strayer University  
D.B.A., Walden University

BA 101 – Introduction to Business; BA 203 – Principles of Marketing; SCM 101 – Intro to Supply Chain Management; SCM 103 – Inventory Management

*Susan Muaddi Darraj*

Associate Professor of English  
B.A., Rutgers State University of New Jersey  
M.A., Rutgers State University of New Jersey

ENG 101- English Composition  
General Education Humanities

*Meredyth Puller*

Associate Professor of English  
B.A., Kent State University  
M.A., Youngstown State University

ENG 101 – English Composition

*Terry Surasky*

Assistant Professor of Mathematics  
B.S., Towson University  
M.Ed., Loyola University Maryland

General Education Math

*Scott West*

Assistant Professor of English  
A.A., Harford Community College  
B.A., Goucher College  
M.A., Morgan State University  
M.F.A., University of Baltimore

ENG 101- English Composition

*Dr. Miriam Wigglesworth, CPA*

Professor of Business  
B.S., Loyola University of Maryland

M.S., University of North Texas

BA 101 – Introduction to Business; BA 203 – Principles of Marketing; ACCT 101 – Accounting Principles I; ACCT 102 – Accounting Principles II.

## J. Adequacy of Library Resources

The HCC Library is a 25,734 square foot facility located centrally on campus. It is open seven days per week for student access. The library's website provides 24-hour free access to the catalog, databases, subject guides, tutorials and other resources. Borrowing privileges are available for all students, as well as county residents 18 years or older. The library focuses its collection on a mixture of print, electronic, and video resources to meet the informational and curricular needs of the HCC community. Students have access to full-text journal, magazine and newspaper articles through the College's subscription databases. Streaming video collections are available through two databases, Films on Demand and Alexander Street Press. Students have access to unlimited resources through the Inter-Library Loan Service, which can deliver titles from almost any academic library in the country.

## K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

### 1. Assurance regarding physical facilities, infrastructure, and equipment

No new facilities are required for this program. Physical resources at HCC offer sufficient space and learning technology to support education. The 352-acre campus has a physical plant of 21 buildings including a performing arts center, an observatory, a 3,000-seat arena and athletic center and six classroom buildings.

Students enrolled in the program have access to the HCC Learning Center for tutoring services in math, science, writing, study skills and test taking skills. Additionally, the Test and Assessment Center, Academic Advising and Transfer Services, and Career Services are all resources of the college that may be utilized episodically for individual or groups of students.

Information Technology Services (ITS) at HCC provide technology support for desktop, laptop and tablet devices provided by the college, classroom computers and instructional technology such as SMART Boards, LCD projectors, and DVDs. Wireless access is available throughout the HCC campus. Open-access computer labs located in the library offers a wide selection of computer software and applications for student use, including multimedia production and digital editing capabilities. A resource help desk, staffed by eLearning personnel, is located in this area specifically for student help with online resources.

2. Assurance regarding distance education access in terms of institutional electronic mailing system and learning management system

All faculty and credit-earning students are provided with an institutional e-mail account that integrates with the learning management system. Open-access, comprehensive student support for the learning management system is provided in module format and includes “how to” video and print tutorials, an eLearning Help Desk, links to student services, and tips for success in an online learning environment. Faculty are assigned an eLearning point-of-contact for technical support, a learning management system “trouble-shoot” guide, and access to Help Desk dedicated line.

## L. Adequacy of Financial Resources with Documentation

### 1. Table 1: Resources

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	\$0	\$0	\$0	\$0	\$0
2. Tuition/Fee Revenue (c + g below)	\$43,500	\$52,200	\$60,900	\$73,950	\$87,000
a. Number of F/T Students <sup>1</sup>	10	12	14	17	20
b. Annual Tuition/Fee Rate <sup>2</sup>	\$4,350	\$4,350	\$4,350	\$4,350	\$4,350
c. Total F/T Revenue (a x b)	\$43,500	\$52,200	\$60,900	\$73,950	\$87,000
d. Number of P/T Students	0	0	0	0	0
e. Credit Hour Rate	\$135.00	\$135.00	\$135.00	\$135.00	\$135.00
f. Annual Credit Hour Rate	\$0	\$0	\$0	\$0	\$0
g. Total P/T Revenue (d x e x f)	\$0	\$0	\$0	\$0	\$0
3. Grants, Contracts & Other External Sources	\$0	\$0	\$0	\$0	\$0
4. Other Sources Consolidated Service Fee <sup>3</sup>	\$8,100	\$9,720	\$11,340	\$13,770	\$16,200

<sup>1</sup> As this is a new program, the projected new students is estimated conservatively at 10, with a 20% growth per academic year.

<sup>2</sup> \$135.00/credit x 30 credits=\$4,050 + average of \$300 in course fees

<sup>3</sup> \$27.00/credit x 30 credits = \$810 x number of students

TOTAL (Add 1 – 4)	\$51,600	\$61,920	\$72,240	\$87,720	\$103,200
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2. Table 2: Expenditures

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	\$65,000	\$66,300	\$67,626	\$68,979	\$70,358
a. # FTE <sup>4</sup>	1	1	1	1	1
b. Total Salary <sup>5</sup>	\$65,000	\$66,300	\$67,626	\$68,979	\$70,358
c. Total Benefits <sup>6</sup>	\$0	\$0	\$0	\$0	\$0
2. Admin. Staff (b + c below)	\$0	\$0	\$0	\$0	\$0
a. # FTE <sup>7</sup>	0	0	0	0	0
b. Total Salary	\$0	\$0	\$0	\$0	\$0
c. Total Benefits	\$0	\$0	\$0	\$0	\$0
3. Support Staff (b + c below)	\$0	\$0	\$0	\$0	\$0
a. # FTE <sup>8</sup>	0	0	0	0	0
b. Total Salary	\$0	\$0	\$0	\$0	\$0
c. Total Benefits	\$0	\$0	\$0	\$0	\$0
4. Equipment <sup>9</sup>					
5. Library <sup>10</sup>	\$0	\$0	\$0	\$0	\$0
6. New or Renovated Space	\$0	\$0	\$0	\$0	\$0
7. Other Expenses <sup>11</sup>	\$0	\$0	\$0	\$0	\$0
TOTAL (Add 1 – 7)	\$65,000	\$66,300	\$67,626	\$68,979	\$70,358

<sup>4</sup> The expenditures listed reflect the number of FT Faculty needed to meet the program’s ACCT, BA, and OS courses. FT Faculty at Harford Community College are required to teach 30 credit hours per academic year. The program will be implemented with existing faculty resources.

<sup>5</sup> Salaries are projected to increase 2% each academic year.

<sup>6</sup> Health benefits and administrative costs are expected to be covered by current faculty/administrative structures.

<sup>7</sup> Program will be implemented with existing administrative staff resources.

<sup>8</sup> Program will be implemented with existing administrative staff resources.

<sup>9</sup> Equipment is budgeted in the operating budget on an ongoing basis.

<sup>10</sup> Library resources are budgeted in the operating budget on an ongoing basis.

<sup>11</sup> Expenses such as professional development, travel, memberships, office supplies, communications, data processing, and equipment maintenance are budgeted in the operating budget on an ongoing basis.

## M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15)

### 1. Course evaluation procedures

Faculty are evaluated annually by the division dean using the following core components: instruction observations, syllabus, final examinations, assessment instruments or strategies used to evaluate course objectives and academic outcomes, data reports and written critiques of student surveys of instruction, participation records of college assignments, professional development activities, and college and community service activities.

HCC has a systematic plan for evaluation of all degree programs and courses that will be applied to the Supply Chain Management program. The College supports the review of curriculum as a significant component of an overall educational effectiveness plan. Program reviews lead to program and course improvements that are based on sustained information gathering and analysis and provide insight for needed resources and ensure superior educational programs that meet student and community needs. Program reviews assess how well the program has achieved its objectives and suggests potential approaches to enhance this effort and address and fulfill accreditation requirements as prescribed by Middle States.

### 2. Institutional assessment of program effectiveness

The program evaluation process includes faculty and staff within and outside of the program, students, advisory board members, representatives from resource areas in the college, and other communities of interest. This clearly defined program review process provides a consistent framework for evaluating a program's educational effectiveness and includes the use of a comprehensive data management system to systematically collect and report student learning outcome assessments and collaboration with the Office of Analytics and Planning for data regarding student retention and completion, faculty and student satisfaction, and program cost-effectiveness. All programs and their options/tracks, including A.A.S. (career), certificate, A.A. /A.S./A.F.A./A.A.T. (transfer) degree programs, and programs such as General Education, Information Literacy and Distance Learning are evaluated every three to five years on a planned cycle.

## N. Consistency with the State’s Minority Student Achievement Goals (as outlines in COMAR 13B.02.03.05)

### 1. Minority student needs

HCC has a history of promoting diversity and creating an environment that is open and inclusive for students, visitors, and employees. HCC embraces differences, respects intellectual and academic freedom, promotes critical discourse, and encourages socio-cultural and global awareness.

HCC has developed strategies to address the eradication of the attainment gap including implementation of the My College Success Network (MCSN) and Soar2Success (S2S). Established in July 2014, these programs are a network of services, events, staff and faculty geared toward empowering and supporting African American students.

In 2018, HCC joined Achieving the Dream (ATD), a network dedicated to improving student success, with a particular focus on academic goal attainment, personal growth, and economic opportunity for low-income students and students of color.

## O. Relationship to Low Productivity Programs Identified by the Commission

This proposed program is not directly related to an identified low productivity program.

## P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

### 1. Affirmation of institutional distance education eligibility

HCC is an approved institution of the National Council for State Authorization Reciprocity Agreement (NC-SARA). As a NC-SARA institution, HCC is approved to offer distance learning courses to students who reside in other NC-SARA approved states. At this point in time, HCC is unable to admit students from California, as California is not a participating member of NC-SARA.



## 2. Assurance regarding C-RAC guidelines

HCC does comply with C-RAC guidelines for the Evaluation of Distance Education. The College's eLearning Department and the Distance Learning Committee (DLC) ensure online learning offered by HCC aligns with the College's mission and provides accessible, innovative, and learner-centered education as a means to promote individual goal attainment, as well as career and workforce development. Both the DLC and eLearning have worked together to develop a formal Quality Matters review for courses as well as an internal review process for all new and existing online classes at HCC to ensure a high quality and rigorous educational experience for all online students.

Blackboard is used as the College's learning management system (LMS). All full and part-time faculty are provided Blackboard course sites for each of their courses and are required to complete Blackboard basic training or demonstrate competency through a "Blackboard Veterans" quiz developed internally. In addition to the required training, course syllabi, contact information, and college closing information must be included on all course sites. To further facilitate student success in online learning environments, the DLC developed and implemented common nomenclatures for online course menus to standardize terminology used in courses across campus. An "Online Readiness Check" was also developed as a tool to assess the readiness of students interested in enrolling in online courses.

eLearning also provides professional development training that focuses on enhancing online instruction for all faculty throughout the year. Workshops and training sessions range in level and content in order to adequately provide faculty with relevant information and experiences, as well as facilitate continual growth in online instruction.

## Appendix A: Best Practices for HCC Online Courses

### Faculty Presence

Faculty should have an active presence that encourages student involvement in the online course environment. Courses that adhere to this practice will typically include several of the following:

- Expectations of availability and turn-around time are clear
- There is evidence that instructors will regularly engage with students in various course activities.
- Faculty intends to provide frequent and substantial feedback
- A personable faculty introduction is included
- A welcome is clearly visible upon first logging into the course

### Start-Up Information & Navigation

Course navigation guidance, including start-up information, is readily available. The course is well organized and easy to navigate. Courses that adhere to this practice will typically include several of the following:

- A location, clearly evident upon logging into the course, labeled “start here,” includes information the student should view prior to starting the course selected by the instructor such as welcome letter, syllabus, instructor information, student expectations/tips for success, etc.
- The syllabus is complete and easy to access
- Navigation is clear, simple, and user friendly
- The course schedule is summarized in one location
- Organization and sequencing of the course content is logical and clear
- Required instructional materials are easily located
- Links to other parts of the course and external sources are accurate and up to date
- FAQs or help for technological issues are available

### Content

Instructional rigor is equal to that of a face-to-face course. It is delivered to address different learning styles and reinforced through various tools. Courses that adhere to this practice will typically include several of the following:

- Instructional content should include more than one of the following: readings, online lectures, videos, simulations, case studies, games, discussion forums, study guides, practice problems, pretests, homework, etc.
- Activities promoting a sense of engagement and community are included, such as scavenger hunt, ice breakers, collaborative exercises, discussion boards, etc.
- The pace of the course is appropriate to the course content and level
- Clear information and instructions are provided regarding the access of required course materials
- Appropriate media supports course content and adds interest
- Any materials which are not required are clearly marked as optional
- Written material is professional and uses language appropriate to the course topic and level
- Copyright ownership is followed and clearly documented
- All course components are visually and functionally consistent with each other

## Active Learning

The course provides a variety of opportunities for interaction that support active learning. Courses that adhere to this practice will typically include several of the following:

- The course includes activities which provide opportunities for students to interact with the teacher, with each other, and with the content
- Activities are included which do not have a single right answer
- Challenging tasks are presented
- Sample cases and assignments are used as a template
- Expectations for student participation in the course activities are clear
- Activities and assessments encourage students to apply, analyze and evaluate course content
- Students are encouraged to create new understandings as demonstrated on course assessments
- Students have input to the learning environment, for example, due dates, assessment formats, course content, etc.

## Assessment

Various forms of assessment occur throughout the course, in accordance with the HCC attendance policy, and measures student achievement of Student Learning Objectives and/or competencies.

Courses that adhere to this practice will typically include several of the following:

- Forms of assessment should include more than one of the following: quizzes, papers, discussions, self-checks, projects, tests & exams, presentations, case studies, labs, skill assessments, etc.
- Assessments clearly align with Student Learning Objectives
- Instructions, student expectations, and grading standards are clearly stated, this may include the provision of sample assignments
- The course grading policy and grading calculations are stated clearly
- The gradebook is visible to students and there are clear instructions on how students can access their grades and feedback, preferably using the Blackboard Grade Center
- The gradebook is current

## Accessibility

Course design reflects a commitment to accessibility and usability throughout the course. Courses that adhere to this practice should include the following:

- Course content is in compliance with the Americans with Disabilities Act
- The course design facilitates readability (e.g., color, font, use of white space, length, background, etc.)
- Necessary technology is easily obtainable
- Course media is easy to view and operate
- Technology used in the course supports achievement of the Student Learning Objectives
- Hardware and software requirements are clearly stated and students are given information about downloading necessary software
- Information directing students to methods of accessing institutional support services; including technology, accessibility, and academic support is included