# **Gallatin College Departmental Assessment Plans**

Gallatin College started building assessment reports and Program Outcomes Assessment plans Fall 2014, so the reports below are the schedules and samples from the past two years.

# 1. Associate of Applied Science (AAS) in Aviation

### **Aviation Program Outcomes:**

- 1. Apply knowledge in aviation to adapt to emerging aviation trends.
- 2. Conduct themselves professionally and ethically.
- 3. Understand and analyze the role of aviation safety and human factors to the aviation industry.
- 4. Describe meteorology as it relates to aviation.
- 5. Independently fly and safely operate airplanes for which they are rated.
- 6. Demonstrate an understanding and the appropriate application of aeronautical principles, design characteristics, and operational limitations, for a variety of aircraft as it relates to the student's career goals.
- 7. Communicate effectively using both written and verbal skills.
- 8. Demonstrate proficiency in math computation for aviation and modern society.
- 9. Demonstrate effective skills in the use of computers and aviation related technology

Aviation – AAS Degree				Program Outcomes						
Course	Cr	1	2	3	4	5	6	7	8	9
AVFT 121 – Private Pilot – Fundamentals		1	1	-I			I,D	D	D	I.
AVFT 122 – Private Pilot – Flight	2				I,D	I,D	- I			1
AVFT 130 – Meteorology for Aviation	3	D		D	М		- I		I	1
CAPP 120 – Intro to Computers	3							- I	I	1
AVFT 141 – Advanced Navigation Systems	3	D			D		- I			М
AVFT 143 – Instrument Ground	3	D		D	М		М			D
AVFT 142 – Instrument Flight	2				М	М				D
AVFT 150 – Aviation Operations	3	D	D					D		
AVFT 171 – Aircraft Systems for Pilots	3	D					М			
AVFT 245 – Commercial Ground	3	М	D	D	М		М	D	D	М
AVFT 250 – Commercial Flight 1 Single Engine	2				D	М				М
AVFT 252 – Commercial Flight 1 Multi Engine	2				D	М				М
AVFT 260 – Aviation Safety		D	D	М	D		D	D		D
AVFT 251 – Commercial Flight 2 Single Engine	2				D	М				
AVFT 261 – Flight Instructor Theory		М	М	М	М		М	М	М	М
AVFT 262 – Advanced Aircraft Theory			М	М	D		М	М	D	М
AVFT 263 – Aviation Regulations and Prof. Conduct	3	М	М	D			I	М		

# Performance Thresholds:

I: Introd	uctory Level	D: Develo	oing Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

# Assessment Schedule:

				Year		
Outcome	2014-	2015-	2016-	2017-	2018-	2019-
	2015	2016	2017	2018	2019	2020
1	x			Х		
2	x			Х		
3	x			x		
4		X			X	
5		X			X	
6		X			X	
7			x			X
8			x			X
9			X			X

## 2. Certificate in Applied Science (CAS) in Bookkeeping

#### **Bookkeeping Program Outcomes:**

- 1. Analyze and process basic financial transactions through the accounting cycle for sole proprietorships, partnerships, and corporations.
- 2. Prepare and analyze financial statements in accordance with Generally Accepted Accounting Principles (GAAP).
- 3. Communicate financial information to internal and external users to make business decisions.
- 4. Demonstrate proficiency in using computer software to perform bookkeeping and business tasks and prepare financial reports.
- 5. Perform basic office functions using standard and emerging technologies typical in entrylevel accounting positions.
- 6. Prepare and process payroll records and reports in compliance with federal and state requirements.
- 7. Communicate orally and in writing at a professional level necessary for successful employment in a business environment.
- 8. Apply critical thinking skills to make decisions that demonstrate awareness of social responsibility as well as legal and ethical standards within the accounting profession.

I: Introd	luctory Level	D: Develop	oing Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

### Performance Thresholds:

Bookkeeping – CAS Degree		Program Outcomes							
Course	Cr	1	2	3	4	5	6	7	8
ACTG 101: Accounting Procedures I	4	М	D	D				D	D
ACTG 180: Payroll Accounting	4			D			М		D
CAPP 120: Intro to Computers	3				l I	l I			1
CAPP 156: Microsoft Excel	3			D	D	D			l I
COMX 102: Interpersonal Skills in the Workplace	1							М	D
WRIT 104: Workplace Communications	2					D		М	D
ACTG 102: Accounting Procedures II	4	М	М	М				D	М
ACTG 205: Computerized Accounting	3	D	М	М	М		D	D	D
ACTG 122: Accounting & Business Decisions	3			М				D	М
ACTG 125: QuickBooks	3	М	М	М	М		М		D
TASK 127: Business Office Procedures	3				D	М		М	D

Sample Assignments [that show how well students meet each learning outcome ("M" level)]:

Outcome 1: Accounting Cycle Project (ACTG101)

Outcome 2: Final Exam (ACTG102)

Outcome 3: Budgeting Project (ACTG205)

#### Assessment Schedule:

				Year		
Outcome	2014-	2015-	2016-	2017-	2018-	2019-
	2015	2016	2017	2018	2019	2020
1	x			x		
2	x			x		
3	x			x		
4		x			x	
5		x			x	
6			x			X
7			x			X
8			x			X

### 3. Professional Certificate (PC) in Business Management

#### **Business Management Professional Certificate Outcomes:**

- 1. Objectively evaluate their concepts and plans for moving forward with their business plans.
- 2. Develop a working knowledge of business fundamentals such as management principles, marketing, product/service development, sales, and basic accountancy.
- 3. Understand and be capable of building a business infrastructure for business operations, processes and financial decision making.
- 4. Explore risk and success factors in the marketplace, develop a media strategy.
- 5. Understand how to access human, financial, and business resources.
- 6. Create an environment that encourages interaction with other entrepreneurs and professionals.
- 7. Identify and meet market needs, learn to respond to changes that can impact business.
- 8. Build an actionable business plan; and be an effective and prepared leader.

Business Management Professional Certificate		Program Outcomes							
Course	Cr	1	2	3	4	5	6	7	8
BGEN 105: Intro. to Business	3		- 1	-	- I	-	- 1	- 1	
ACTG 101: Accounting Procedures I	4		Μ			D			
BMGT 215: Human Resource Management	3		D	D		М			
BMGT 210: Small Business Entrepreneurship	3	М	D	М	D	D	М	D	М
BMKT 240: Advertising	3		М		М			М	
ACTG 122: Accounting & Business Decisions	3		М	М		D			
ACTG 125: QuickBooks	2		Μ	Μ		D			
BMKT 222: Customer Service & Marketing	3		М		М			М	
BGEN 235: Business Law	3		Μ	Μ		Μ			
TASK 127: Business Office Procedures	3								
BMKT 112: Applied Sales	3		M		M			М	

# Sample Assignments [that show how well students meet each learning outcome ("M" level)]:

Outcome 1: Business Plan (BMGT210)

Outcome 2: Final Paper (BGEN105)

Outcome 8: Business Plan (BMGT210)

**Performance Thresholds** for each outcome:

I: Introductory Level		D: Develop	oing Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

#### Assessment Schedule:

				Year		
Outcome	2014-	2015-	2016-	2017-	2018-	2019-
	2015	2016	2017	2018	2019	2020
1	X			x		
2	X			x		
3			x			х
4		x			x	
5		x			x	
6			x			х
7			x			X
8	x			x		X

### 4. Certificate of Applied Science (CAS) in CNC Machine Technology

#### **CNC Machine Technology Program Outcomes:**

- 1. Operate computer numerically controlled (CNC) machines, such as lathes, mills, precision measuring tools, and related attachments and accessories.
- 2. Perform machining functions, such as cutting, drilling, shaping, and finishing products and component parts.
- Understand and exercise the following skills: CNC terminology, setup, programming, operations, and troubleshooting; Blueprint reading; Machining; Lathe and mill operations; Technical mathematics; Computer literacy; CAD/CAM systems; Shop and safety practices; Equipment capabilities; Regulations and laws
- 4. Obtain National Institute for Metalworking Standards (NIMS) Skills credentials.
- 5. Complete Haas V-F Series Milling Machine and GUI control setup.
- 6. Knowledge and operations of Gibbscam and G-code.

CNC Machine Technology - CAS	Program Outcomes						
Course	Cr	1	2	3	4	5	6
M 111 – Technical Mathematics	3						1
MCH 103 – Intro to Computer Aided Manufacturing	2						<u> </u>
MCH 120 – Blueprint Reading	2			D			
MCH 130 – Machine Shop	3		D	D	Μ		
MCH 231 – CNC Turning Operations Level 1	3	D	D	D			- I
MCH 234 – CNC Milling Operations Level 1	3	D	D	D		D	- I
MCH 232 – CNC Turning Operations Level 2	3	Μ	М	D	М		D
MCH 235 – CNC Milling Operations Level 2	3	Μ	М	D	М	М	D
MCH 230 – Tooling and Fixtures Used in CNC	2	M	М	D			D
MCH 104 – Intro to Computer Aided Manufacturing	2	-		D			D
MCH 122 – Introduction to GibbsCAM	3	D		D			D

# **Performance Thresholds:**

I: Introd	uctory Level	D: Develop	oing Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

# Program Outcome Assessment Schedule:

				Year		
Outcome	2014-	2015-	2016-	2017-	2018-	2019-
	2015	2016	2017	2018	2019	2020
1	x			Х		
2	х			Х		
3		X			X	
4		X			X	
5			X			X
6			X			X

# 5. Associate of Applied Science (AAS) in Design Drafting Technology

Desig	Design Drafting Technology Program Outcomes:							
Upon p	program completion, the successful will be able to:							
1.	Read and Understand Shop Drawings, Construction Drawings and Details							
2.	Do takeoffs and estimates of materials from printed plans							
3.	Have a strong understanding of the materials and processes that are a part of home construction and manufacturing.							
4.	Create Construction Documents and Shop Drawings for Architects, Engineers and Manufacturers							
5.	Visualize and measure 3D objects and buildings and recreate them in computer-aided design software (CAD)							
6.	Render objects and buildings for presentation in programs including: Adobe Photoshop, AutoCAD Architecture, and 3DS Max							
7.	Create a complete set of permit ready residential plans							
8.	Draw a site plan and thematic maps (including topography) using CAD software and GIS data							
9.	Prepare and present professionally themselves and their portfolio and projects							
10.	Use Critical Thinking Techniques to solve problems, especially as related to Design Drafting disciplines							
11.	Understand computer hardware vocabulary, basic hardware maintenance, software installation and updating, and basics of home and small office networking							
12.	Assess their skills and talents and present themselves in a way so that they can follow a career path that they will enjoy and benefit from.							

# Performance Thresholds for each outcome:

I: Introd	uctory Level	D: Develop	oing Level	M: Mastery Level		
Knowledge	Comprehension	hension Application Analysis		Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

Design Drafting Technology – AA	S				F	Prog	ram	Outo	come	es			
Course	Cr	1	2	3	4	5	6	7	8	9	10	11	12
CSTN 148 - Blueprint Codes and Est.	2	М	М	I									
CSTN 173 - Arch Construct and Material	3	D	D	D	D								
DDSN 112 - Professional Practices	3									D			D
DDSN 113 - Technical Drafting	3	1				D	D	D			- 1		
DDSN 118 - CAD 1	4							D					
(DDSN 101 – CAD 1 A)	2				-	-							
(DDSN 102 – CAD 1 B)	2				D	D		-			D		D
DDSN 124 - Descriptive Geometry	4				D	D			I		D		- 1
DDSN 166 - Revit 1	3				D	D		D			D	1	
DDSN 186 - CAD 2	3					D					D		
DDSN 244 - GIS and Mapping	3								Μ		D		
DDSN 245 - Civil Drafting	3								Μ		D		
DDSN 255 - Machine Drafting	3			D	D	D					D		
DDSN 256 - Machine Drafting - 2	3			Μ	Μ	Μ					Μ		
DDSN 265 - Architectural Drafting	3			Μ	Μ	Μ		Μ	D		Μ		D
DDSN 266 - Revit 2	3				Μ	Μ		D			D		
DDSN 275 - Computer Rendering	3					Μ	Μ						
DDSN 276 - Presentation & Animation	3					Μ	Μ						
DDSN 298 - Internship	4									D	D	D	D
DDSN 299 – Capstone: Portfolio	3					Μ	Μ			Μ			Μ
ITS 280 – Computer Repair &	3										D	М	I
Maintenance													
MFTG 205 – Manufacturing Processes	3			D	D					I			D

### **Outcome Assessment Schedule:**

				Year		
Outcome	2014-	2015-	2016-	2017-	2018-	2019-
	2015	2016	2017	2018	2019	2020
1	Х			Х		
2	Х			Х		
3	Х			Х		
4	Х			Х		
5		Х			X	
6		Х			X	
7		Х			X	
8		Х			X	
9			X			X
10			X			Х
11			X			X
12			X			X

### 6. Certificate in Applied Science (CAS) in Health Information Coding

#### Health Information Coding Program Outcomes:

- 1. Graduate skilled entry level medical coders who can abstract patient information and combine it with universally recognized coding systems to assign and sequence diagnostic codes (ICD9, ICD10, HCPCS).
- 2. Graduate skilled entry level medical coders who can abstract patient information and combine it with universally recognized coding systems to assign and sequence procedural codes (CPT).
- 3. Code complete case studies using a computerized encoder program.
- 4. Perform billing and reimbursement procedures.
- 5. Pass the national coding exam.

Health Information Coding – CAS Degree	Pr	Program Outcomes				
Course	Cr	1	2	3	4	5
AH 140 - Pharmacology	2					Μ
AHMS 144 - Medical Terminology	3	l.				М
BIOH 112 - Human Form & Function I	3	l.				М
BIOH 113 - Human Form and Function II	3	1	I			М
AHMS 160 - Beginning Procedural Coding	4					Μ
AHMS 162 - Beginning Diagnostic Coding	4	1				М
AHMS 156 - Medical Billing Fundamentals	3				I,D	Μ
AHMS 158 - Legal and Regulatory Aspects of	2	I,D	I,D			Μ
Healthcare						
AHMS 100 - Math Applications Health	3				l I	М
AHMS 250 - Advanced Medical Coding	4	D	D			M
AHMS 298A Professional Practice Experience	1			Μ		М

1.) Performance Thresholds for each outcome:

I: Introd	uctory Level	D: Develop	oing Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

2.) Schedule to assess each outcome:

	Year								
Outcome	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020			
1	х			х					
2	х			х					
3		X			X				
4		X			X				
5			X			X			

3.) Documentation to show mastery in the programmatic outcomes:

The final exam for AHMS 160 and 162

2-3 competencies from each of the following classes to show skill acquisition: AHMS156, AHMS158, AHMS250

Printout from the computerized coding case studies showing competency.

CCA(AHIMA) scores for the previous year's graduating class.

## 7. Associate of Applied Science (AAS) in Interior Design

#### **Interior Design Program Outcomes:**

- 1. Understand the theory and history of design and apply design principles and elements to their projects.
- 2. Communicate in the language of interior design using listening, verbal, and written skills to interact with clients and industry professionals.
- 3. Communicate graphically according to current architectural and NKBA standards using both hand and computer drafting techniques.
- 4. Demonstrate research abilities and critical thinking in space planning, selection of finish materials, and application of codes for residential and commercial projects.
- 5. Increase their body of knowledge in a wide variety of areas including construction methods, finish materials, color and lighting technologies, residential and commercial codes, sustainability, and professional practice.
- 6. Employ up-to-date industry methods to create presentations and information organization for a wide variety of applications by using hand and/or computer drafting, rendering and modeling programs.

I: Introd	uctory Level	D: Develor	ping Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

#### **Performance Thresholds:**

Interior Design – AAS Degree	Р	Program Outcomes					
Course	Cr	1	2	3	4	5	6
IDSN 101 - Intro to Interior Design	3			I	I		I
IDSN 110 - Hist of Int Dsgn I Ancnt-1900	3	-			-		
IDSN 130 - Interior Design Graphics	3		1	- I			
IDSN 131 - Presentation Drawing	3						D
IDSN 135 - Fundamentals of Space Planning	3	D	1	D	D	D	D
IDSN 225 - Light/Color/Lighting Systems	3	D	D	D	D	D	D
CSTN 173 - Arch Construct and Material			D	- I	D		
IDSN 122 - Textiles and Interior Finishes	3		D	D	D		
IDSN 240 - Studio I Residential	4	D	Μ	Μ	Μ	Μ	Μ
IDSN 266 - Kitchen and Bath	4	D	Μ	Μ	Μ	Μ	Μ
IDSN 298 – Internship	3-5		D		D	D	
IDSN 111 - Hist Int Dsgn II 1900-Contemp	3	D			D		D
IDSN 250 - Studio II Commercial*	4	М	Μ	Μ	Μ	Μ	Μ
IDSN 267 - Kitchen and Bath II*	4	Μ	Μ	Μ	Μ	Μ	Μ
IDSN 275 - Professional Practices*	3		Μ	Μ		Μ	Μ
IDSN 292 - Independent Study	1-3	Μ	Μ	Μ	Μ	Μ	Μ
DDSN 118-CAD 1			I	I		I	

#### **Outcome Assessment Schedule:**

	Year										
Outcome	2014-	2015-	2016-	2017-	2018-	2019-					
	2015	2016	2017	2018	2019	2020					
1	X			Х							
2	X			Х							
3		X			X						
4		Х			X						
5			x			X					
6			X			X					

## Sample Assignments Showing Outcome Assessment:

IDSN 240: Project 2, Phase I & II IDSN 250: Studio 2 Project A-1-5 IDSN 267: K&B II Final Project IDSN 275: Courthouse Project

# 8. Certificate in Applied Science (CAS) in Medical Assisting

- 1. Graduate skilled entry level medical assistants who are cross-trained to work in all areas of a physician's office or other ambulatory care setting. This includes competency in:
  - a. the front office
  - b. the clinical area assisting with patients
  - c. the laboratory performing CLIA waived tests.
- 2. Participate in a 200 hour externship experience in a designated health care setting.
- 3. Pass the national medical assisting exam.

Medical Assistant – CAS Degree Program Outcomes					es	
Course	Cr	1a	1b	1c	2	3
AH 140 - Pharmacology	2	I,D	I,D			М
AHMS 144 - Medical Terminology	3	I,D	I,D	I,D		М
BIOH 112 - Human Form & Function I	3		I,D	I,D		М
AHMA 201 - MA Clinical Procedures I	4			I,D		М
AHMA 203 - MA Clinical Procedures II	4		I,D			М
AHMA 280 - Med Assisting Exam Prep	1					М
AHMS 100 - Math Applications Health	3	I,D	I,D	I,D		М
AHMS 158 - Legal and Regulatory Aspects of	2	I,D	I,D	I,D		М
Healthcare						
AHMS 220 - Medical Office Procedures	3	I,D				М
BIOH 113 - Human Form and Function II	3		I,D	I,D		М
AHMA 298 - Medical Assisting Externship	4				М	М

### **Performance Thresholds:**

I: Introd	uctory Level	D: Develo	oing Level	M: Mastery Level		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes	
Describes	Distinguishes	Computes	Compares	Composes	Critiques	
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends	
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates	
Lists		Solves		Designs	Interprets	
Recognizes				Modifies	Justifies	

#### **Assessment Schedule:**

				Year		
Outcome	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020
1a	X			X		
1b	x			х		
1c		x			X	
2		x			X	
3			X			X

#### Assessment Documentation:

Documentation to show mastery in the programmatic outcomes:

2-3 competencies from each of the following courses to show skill acquisition.

AH140, BIOH112, BIOH113, AHMA 201, AHMA 203, AHMS 158, and AHMS 220

The final in AHMS 144 and AHMS 100

The scores of the mock national exam for AHMA280.

The RMA (AMT) scores for the previous year's graduating class.

## 9. Certificate in Applied Science (CAS) in Welding Technology:

- 1. Meet safety requirements.
- 2. Produce welds in all positions that meet industry standards using the following process(es):
  - a. Shielded Metal Arc Welding (SMAW)
  - b. Gas Metal Arc Welding (GMAW)
  - c. Flux Cored Arc Welding (FCAW)
- 3. Make cuts that meet industry standards in the following process(es):
  - a. Plasma Arc Cutting (PAC)
  - b. Air Carbon Arc Cutting (CAC-C)
- 4. Understand the use of measuring instruments and their purpose.
- 5. Understand power sources and current types.
- 6. Interpret welding blueprints and weld symbols.
- 7. Utilize basic welding metallurgy.
- 8. Utilize oral and written communication skills in the workplace, including terminology in the welding industry.

#### **Performance Thresholds**

I: Introductory Level		D: Develop	oing Level	M: Mastery Level	
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Defines	Comprehends	Applies	Analyzes	Categorizes	Concludes
Describes	Distinguishes	Computes	Compares	Composes	Critiques
Identifies	Interprets	Demonstrates	Contrasts	Creates	Defends
Knows	Summarizes	Prepares	Distinguishes	Devises	Evaluates
Lists		Solves		Designs	Interprets
Recognizes				Modifies	Justifies

#### Assessment Schedule:

	Year					
Outcome	2014-	2015-	2016-	2017-	2018-	2019-
	2015	2016	2017	2018	2019	2020
1	x			X		
2	x			X		
3	x			x		
4		X			X	
5		X			X	
6			x			x
7			X			X
8			X			X

# a. Program Learning Outcomes

### Aviation (AAS) Program Outcomes:

- 1. Apply knowledge in aviation to adapt to emerging aviation trends.
- 2. Conduct themselves professionally and ethically.
- 3. Understand and analyze the role of aviation safety and human factors to the aviation industry.
- 4. Describe meteorology as it relates to aviation.
- 5. Independently fly and safely operate airplanes for which they are rated.
- 6. Demonstrate an understanding and the appropriate application of aeronautical principles, design characteristics, and operational limitations, for a variety of aircraft as it relates to the student's career goals.
- 7. Communicate effectively using both written and verbal skills.
- 8. Demonstrate proficiency in math computation for aviation and modern society.
- 9. Demonstrate effective skills in the use of computers and aviation related technology

### Bookkeeping (CAS) Program Outcomes:

- 1. Analyze and process basic financial transactions through the accounting cycle for sole proprietorships, partnerships, and corporations.
- 2. Prepare and analyze financial statements in accordance with Generally Accepted Accounting Principles (GAAP).
- 3. Communicate financial information to internal and external users to make business decisions.
- 4. Demonstrate proficiency in using computer software to perform bookkeeping and business tasks and prepare financial reports.
- 5. Perform basic office functions using standard and emerging technologies typical in entrylevel accounting positions.
- 6. Prepare and process payroll records and reports in compliance with federal and state requirements.
- 7. Communicate orally and in writing at a professional level necessary for successful employment in a business environment.
- 8. Apply critical thinking skills to make decisions that demonstrate awareness of social responsibility as well as legal and ethical standards within the accounting profession.

### Business Management (PC) Program Outcomes:

- 1. Objectively evaluate their concepts and plans for moving forward with their business plans.
- 2. Develop a working knowledge of business fundamentals such as management principles, marketing, product/service development, sales, and basic accountancy.
- 3. Understand and be capable of building a business infrastructure for business operations, processes and financial decision making.
- 4. Explore risk and success factors in the marketplace, develop a media strategy.
- 5. Understand how to access human, financial, and business resources.
- 6. Create an environment that encourages interaction with other entrepreneurs and professionals.
- 7. Identify and meet market needs, learn to respond to changes that can impact business.
- 8. Build an actionable business plan; and be an effective and prepared leader.

# CNC Machine Technology (CAS) Program Outcomes:

- 1. Operate computer numerically controlled (CNC) machines, such as lathes, mills, precision measuring tools, and related attachments and accessories.
- 2. Perform machining functions, such as cutting, drilling, shaping, and finishing products and component parts.
- Understand and exercise the following skills: CNC terminology, setup, programming, operations, and troubleshooting; Blueprint reading; Machining; Lathe and mill operations; Technical mathematics; Computer literacy; CAD/CAM systems; Shop and safety practices; Equipment capabilities; Regulations and laws
- 4. Obtain National Institute for Metalworking Standards (NIMS) Skills credentials.
- 5. Complete Haas V-F Series Milling Machine and GUI control setup.
- 6. Knowledge and operations of Gibbscam and G-code.

### Design Drafting Technology (AAS) Program Outcomes:

- 1. Read and Understand Shop Drawings, Construction Drawings and Details
- 2. Do takeoffs and estimates of materials from printed plan.
- 3. Have a strong understanding of the materials and processes that are a part of home construction and manufacturing.
- 4. Create Construction Documents and Shop Drawings for Architects, Engineers and Manufacturers
- 5. Visualize and measure 3D objects and buildings and recreate them in computer-aided design software (CAD)
- 6. Render objects and buildings for presentation in programs including: Adobe Photoshop, AutoCAD Architecture, and 3DS Max
- 7. Create a complete set of permit ready residential plans
- 8. Draw a site plan and thematic maps (including topography) using CAD software and GIS data
- 9. Prepare and present professionally themselves and their portfolio and projects
- 10. Use Critical Thinking Techniques to solve problems, especially as related to Design Drafting disciplines
- 11. Understand computer hardware vocabulary, basic hardware maintenance, software installation and updating, and basics of home and small office networking
- 12. Assess their skills and talents and present themselves in a way so that they can follow a career path that they will enjoy and benefit from.

#### Health Information Coding (CAS) Program Outcomes:

- Graduate skilled entry level medical coders who can abstract patient information and combine it with universally recognized coding systems to assign and sequence diagnostic codes (ICD9, ICD10, HCPCS).
- Graduate skilled entry level medical coders who can abstract patient information and combine it with universally recognized coding systems to assign and sequence procedural codes (CPT).
- 3. Code complete case studies using a computerized encoder program.
- 4. Perform billing and reimbursement procedures.
- 5. Pass the national coding exam.

### Interior Design (AAS) Program Outcomes:

- 1. Understand the theory and history of design and apply design principles and elements to their projects.
- 2. Communicate in the language of interior design using listening, verbal, and written skills to interact with clients and industry professionals.
- 3. Communicate graphically according to current architectural and NKBA standards using both hand and computer drafting techniques.
- 4. Demonstrate research abilities and critical thinking in space planning, selection of finish materials, and application of codes for residential and commercial projects.
- Increase their body of knowledge in a wide variety of areas including construction methods, finish materials, color and lighting technologies, residential and commercial codes, sustainability, and professional practice.
- Employ up-to-date industry methods to create presentations and information organization for a wide variety of applications by using hand and/or computer drafting, rendering and modeling programs.

## Medical Assisting (CAS) Program Outcomes

- 1. Graduate skilled entry level medical assistants who are cross-trained to work in all areas of a physician's office or other ambulatory care setting. This includes competency in:
  - a. the front office
  - b. the clinical area assisting with patients
  - c. the laboratory performing CLIA waived tests.
- 2. Participate in a 200 hour externship experience in a designated health care setting.
- 3. Pass the national medical assisting exam.

# Welding Technology (CAS) Program Outcomes

- Meet safety requirements.
- Produce welds in all positions that meet industry standards using the following process(es):
  - Flux Cored Arc Welding (FCAW)
  - Gas Metal Arc Welding (GMAW)
  - Gas Tungsten Arc Welding (GTAW)
  - Shielded Metal Arc Welding (SMAW)
- Make cuts that meet industry standards in the following process(es):
  - Acetylene Cutting, Welding
  - Air Carbon Arc Cutting (CAC-C)
  - Plasma Arc Cutting (PAC)
- Understand the use of measuring instruments and their purpose
- Understand power sources and current types
- Interpret welding blueprints and weld symbols
- Use basic welding metallurgy
- Use oral and written communication skills in the workplace, including terminology in the welding industry