# ADDENDUM 1 TO THE MARYLAND EDUCATION ALLIANCE AGREEMENT

Anne Arundel Community College ("AACC"), Caroll Community College ("Caroll"), Cecil College ("Cecil"), Chesapeake College ("Chesapeake"), College of Southern Maryland ("CSM"), Harford Community College ("Harford"), and Prince George's Community College ("PGCC") (each a "Member College") entered into the Maryland Education Alliance Master Agreement dated March 3, 2021 ("MEA Agreement"). This Addendum 1 ("Addendum") is entered into as of the date last signed below ("Effective Date") in order to facilitate the transfer of academic credits between Participating Colleges (as defined below) for the completion of an Associate of Applied Science degree in Nuclear Medicine Technology (the "Program") pursuant to the MEA Agreement.

# A. Participating Colleges

- 1. PGCC offers the Program and hereby agrees to accept Qualifying Students (as defined below) into the Program in accordance with the terms of this Addendum. PGCC shall be referred to herein as the "Host Institution" as defined in the MEA Agreement.
- 2. The following Member Colleges wish to send Qualifying Students (as defined below) to PGCC to complete the Program and shall be referred to herein as a "Home Institution" as defined in the MEA Agreement:
  - b. Cecil;c. Harford CC;d. Chesapeake;e. CSM;

f. Carroll

a. AACC;

- 3. The Host Institution and Home Institutions may be collectively referred to herein as "Participating Colleges."
- 4. All terms and conditions of the MEA Agreement apply to this Addendum, unless specified otherwise. Unless defined for the first time in this Addendum, all capitalized terms shall have the meanings ascribed in the MEA Agreement. This Agreement shall be attached as an addendum to the MEA Agreement.

# **B.** Qualifying Students

- 1. A "Qualifying Student" means a student from a Home Institution that wishes to transfer into the Program and meets the following criteria:
  - a. Have successfully completed the required pre-requisite courses at a Home Institution;
  - b. Are enrolled in the Home Institution, in good standing;
  - c. Are accepted for admission to the Host Institution;
  - d. Complete the following equivalent coursework, known as the qualifying coursework, at a Home Institution with a minimum grade of "C" in accordance with the specific Home Institution's individual crosswalk attached as Exhibit 1
  - e. Maintain a minimum of a 2.5 grade point average within the student's qualifying coursework;
  - f. Submit an application packet no later than April 1st of the year in which the student seeks to transfer; and
  - g. Meet all special admissions criteria identified in the current Host Institution's catalog.
- 2. Qualifying Students are only eligible for transfer during the fall semester.
- 3. Part-time students who meet the criteria for Qualifying Students are eligible for transfer in accordance with this Addendum.

# C. Responsibilities of the Participating Colleges

The Participating Colleges agree to implement the transfer of Qualifying Students in accordance with the following requirements and protocols:

- 1. A Qualifying Student may transfer from a Home Institution into the Host Institution for the completion of the Program. Upon transfer, the Qualifying Student will become a student of the Host Institution. The Host Institution shall administer all financial aid and other benefits once the transfer is completed, and the Qualifying Student will pay all tuition and fees to the Host Institution for all courses taken at the Host Institution. The Host Institution shall confer a degree for any Qualifying Student who successfully completes the Program, in the Host Institution's sole discretion.
- 2. Each year, 25% of the seats available in the Program for incoming students shall be reserved for students from Participating Colleges until April 1. After April 1, the seats held for Qualifying Students will be released and can be filled by the Host Institution on a first come, first served basis.

- 3. Participating Colleges that send students to the Program will assist in facilitating clinical agreements in their respective counties/regions. The Host Institution bears the ultimate responsibility for ensuring that students are placed in the Program's required clinical placements.
- 4. Qualifying Students who are Maryland residents and are accepted into the Program may receive the Host Institution's in-county tuition rate pursuant to the Health Manpower Shortage Reduction Program.
- 5. Students who are interested in participating under this Agreement will meet with the Health Sciences Advisor at the Home Institution to receive the application packet.
- 6. The Participating Colleges designate the following employees who will be responsible for the oversight of the transfer of Qualifying Students:

a. PGCC: Angela Anderson, Dean, aanderson@pgcc.edu, 301-546-0699

Nicole Stubbs, Health Sciences Advisor, stubbsnr@pgcc.edu, 301-546-

7513

b. AACC: Elizabeth Appel, Dean, ehappel@aacc.edu, 410-777-7224

Tammie Neall, Health Sciences Admissions Manager, tdnell@aacc.edu,

410-777-7217

c. Cecil: Nancy Norman-Marzella, Dean, nnormanmarzella@cecil.edu, 443-674-

1541

JoEllen Brackin, Advisory Healthcare programs, jbrackin@cecil.edu

d. Chesapeake: Lorraine P. Holden, Director of Academic Advising,

lholden@chesapeake.edu

Lorelly Solano, Academic & Career Advisor, Isolano@chesapeake.edu

e. CSM: Laura Polk, Acting Dean, lypolk@csmd.edu, 301-934-7535

Jacqueline Koerbel, Allied Health Advisor, jskoerbel@csmd.edu,

301-934-7510

f. Harford: Tony Wohlers, Dean, twohlers@harford.edu

Roger Hoover, Advisor, rohoover@harford.edu, 443-412-2206

g. Carroll: Nancy Perry, Nursing Program Director, <u>nperry@carrollcc.edu</u>,

410-386-8231

April Herring, Senior Director, Advising and Retention,

aherring@carrollcc.edu, 410-386-8444

- 7. Participating Colleges will promptly notify the other Participating Colleges and provide new contact information if it wishes to designate a different employee to provide oversight.
- 8. If the Qualifying Student is using federal Title 38 VA Education Benefits (GI Bill® Education Benefits), the Participating Colleges shall adhere to all applicable U.S. Department of Veterans Affairs' regulations, including the regulations governing the awarding prior credit, as regulated under Title 38, Code of Federal Regulations, Sections 21.4253(d)(3) and 21.4254(c)(4).
- 9. Each Participating College shall advise students regarding transfer opportunities under this Addendum and shall advise students of financial aid opportunities and implications associated with the transfer.
- 10. Should a Participating College make changes to program requirements or courses set forth in Exhibit 1, the Participating College making the change shall inform the other Participating Colleges immediately. Major curriculum changes will be submitted to the Board, as set forth by the MEA Agreement. The Addendum should be updated to reflect the changes and forwarded to the Maryland Higher Education Commission.

# C. Term and Termination

- 1. This agreement shall be effective on the date that it is signed by the appropriate and authorized representatives of each Participating College.
- 2. A Participating College may, at its sole discretion, withdraw from this Addendum in accordance with the MEA Agreement. If the withdrawal is approved, the Participating College who is withdrawing from the Addendum shall notify the Maryland Higher Education Commission.
- 3. The Participating Colleges agree to meet once every year to review the terms of this Agreement.
- 4. This Agreement shall terminate upon the dissolution of the MEA Agreement, withdrawal of the Host Institution from this Addendum or as a Member College from the MEA Agreement. In no case will dissolution of the MEA Agreement or withdrawal of the Host Institution from this Addendum or as a Member College jeopardize the graduation of any student currently enrolled in the Program and making satisfactory progress toward graduation, as reasonably determined by the Board.

# D. Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland.

# E. Counterparts

This Agreement may be executed in any number of counterparts, each of which, when so executed and delivered, will be deemed an original, and all of which will constitute one and the same Agreement. This Agreement may be executed by way of electronic signature and signature pages may be exchanged electronically, and such signatures will be deemed original signatures.

# F. Notice of Agreement

- 1. The Host Institution shall provide a copy of the MEA Agreement and this Addendum to the Maryland Higher Education Commission.
- 2. The Participating Colleges agree to provide copies of the MEA Agreement and this Addendum to all relevant individuals and departments of the Participating Colleges, including but not limited to academic department chairs participating in the transfer, offices of the president, registrar's offices, and financial aid offices.

#### G. Amendment

- 1. This Agreement may be modified only by written amendment executed by every Participating College.
- 2. The Host Institution shall provide a copy of any amendments to this Addendum to the Maryland Higher Education Commission.

# H. No Third-Party Beneficiaries

There are no third-party beneficiaries to this Agreement.

# I. No Agency

Except as specifically permitted in this Agreement, no Participating College is authorized to act on behalf of any other Participating College without prior written consent. No agency, partnership or joint venture is created by virtue of this Addendum. Each Participating College is an independent institution. This Participating College creates an affiliation of independent institutions for the benefit of cooperative and coordinated academic instruction only, and no partnership or other entity is formed as a result of this Addendum.

# J. Representations of the Parties

Each Participating College represents that the following shall be true and correct as of the Effective Date of this Addendum and shall continue to be true and correct during the term of this Addendum:

1. The Participating Colleges are and shall remain in compliance with all applicable federal, state, and local statutes, laws, ordinances, and regulations relating to this Addendum, as

amended from time to time, including but not limited to all applicable transfer requirements set forth in the Annotated Code of Maryland and the Code of Maryland Regulations.

2. Each Institution has taken all action necessary for the approval and execution of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

ANNE ARUNDEL COMMUNITY COLLEGE	CARROLL COLLEGE
BY: Alycia Marshall (Aug 11, 2021 18:21 EDT)	BY: Rosalie Mince (Aug 13, 2021 14:31 EDT)
Title: Interim Vice President for Learning	Title: Provost
Date: 08/11/2021	Date: 08/13/2021
CECIL COLLEGE	CHESAPEAKE COLLEGE
BY: Christy Drypr	BY: NE MISSE
Title: Vice-President of Academic Programs	Title: VP for Workforce & Academic Programs
Date: 08/13/2021	Date: 08/12/2021
COLLEGE OF SOUTHERN MARYLAND	HARFORD COMMUNITY COLLEGE
BY: Rodney Redmond (Aug 12, 2021 20:29 EDT)	T. A. Sherwood  BY: T. A. Sherwood (Aug 12, 2021 09:42 EDT)
Title: Provost and Vice President of Learning	Title: Vice President for Academic Affairs
Date:	Date: 08/12/2021
PRINCE GEORGE'S COMMUNITY COLLEGE	
BY: Lleyton A. Poily, E	
Title: EVP/Provost	
_ 06/29/2021	

# EXHIBIT 1 PRINCE GEORGE'S COMMUNITY COLLEGE NUCLEAR MEDICINE TECHNOLOGY, AAS

Courses that students may take at their home institution. PGCC will provide Student Planning Guides which list the course equivalents for each home institution.				
Course #	Course Name	Credits	Credit Type	
EGL-1010	Composition 1: Expository Writing	3	General Education	
COM-1090	Interpersonal Communication	3	General Education	
BIO-2050	Human Anatomy & Physiology I	4	General Education	
BIO-2060	Human Anatomy & Physiology II	4	General Education	
MAT-1250	Applied College Algebra	3	General Education	
PSY-1010	General Psychology	3	General Education	
CHM-1010	General Chemistry	4	Program Requirement	
INT-1010	Introduction to Information Technology	3	General Education	
	Total Credits at Home Institution	27		

Courses that students must complete at PGCC.				
Course #	Course Name	Credits	Credit Type	
NUM-1450	Nuclear Medicine Procedures I	3	Program Requirement	
NUM-1650	Conceptual Physics for Medical Imaging	3	Program Requirement	
NUM-1750	Radiopharmacy/Radio-chemistry	2	Program Requirement	
RAD-1510	Patient Care & Education	2	Program Requirement	
NUM-1460	Nuclear Medicine Procedures I	3	Program Requirement	
NUM-2650	Nuclear Medicine Physics & Protection	3	Program Requirement	
RAD-2440	Radiation Biology & Protection	3	Program Requirement	
NUM-2100	Introduction to Clinical Nuclear Medicine	1	Program Requirement	
NUM-2110	Clinical Nuclear Medicine I	4	Program Requirement	
NUM-2120	Clinical Nuclear Medicine II	3	Program Requirement	
NUM-2130	Clinical Nuclear Medicine III	3	Program Requirement	
NUM-2470	Advanced Molecular Imaging Concepts	2	Program Requirement	
NUM-2140	Clinical Nuclear Medicine IV	4	Program Requirement	
NUM-2150	Clinical Nuclear Medicine V	4	Program Requirement	
NUM-2800	Nuclear Medicine Synthesis	1	Program Requirement	
	Total Credits at PGCC	41		
	Total Credits for Program	68		

# PRINCE GEORGE'S COMMUNITY COLLEGE NUCLEAR MEDICINE TECHNOLOGY, AAS

# **Course Crosswalk from Carroll Community College**

PGCC Course Information				CCC Course Information		
Course #	Course Name	Credits	Credit Type			
				BIO 101*	Fundamentals of Biology 1	4
BIO-2050	Human Anatomy & Physiology I	4	General Education	BIOL 210	Human Anatomy & Physiology 1	4
BIO-2060	Human Anatomy & Physiology II	4	General Education	BIOL 211	Human Anatomy & Physiology 2	4
CHM-1010	General Chemistry	4	Program Requirement	CHEM 105	Principles of General Chemistry 1	4
COM-1090	Interpersonal Communication	3	General Education	COMM 105	Introduction to Speech Communication	3
EGL-1010	Composition 1: Expository Writing	3	General Education	ENGL 101	College Writing	3
INT-1010	Introduction to Information Technology	3	General Education	CIS 101	Intro. to Computer Information Systems	3
MAT-1250	Applied College Algebra	3	General Education	MATH 118	College Algebra	4
PSY-1010	General Psychology	3	General Education	PSYC 101	General Psychology	3
Total Credits at Home Institution		27		Total Credits at Carroll		32

<sup>\*</sup> BIOL 101 is a prerequisite for BIOL 210 and BIOL 211

# **Course Descriptions**

# **BIOL 101 - Fundamentals of Biology 1**

#### **4 Credits**

Fundamentals of Biology 1 is a majors level biology course intended for students pursuing the pathways of STEM, allied health, nursing, PTA, exercise/health science or psychology. The course gives the student who is a science major the basic biological principles common to all living things. Biochemistry, molecular genetics, and evolution serve as central themes for the topics, which include cell structure and function, molecular and cellular energetics, and genetics. Through experiments the student will gain familiarity with various biological techniques and principles. The course includes formulating questions and hypotheses, designing experiments and the collection, reporting, and interpretation of data. Advanced Placement Exam (Biology with a score 4) and CLEP (Biology with a score of 50) accepted. This course does not satisfy the requirements for pathways in early childhood education or elementary education. (Fall, Spring & Summer Only) Three hours lecture. Three hours laboratory. Four Credits. Four billable hours.

GENERAL EDUCATION Category: Biological and Physical Sciences

**Pre-requisite(s):** eligibility for <u>ENGL 101</u>, plus exemption/completion of <u>MAT 095</u> with a minimum grade of C or better.

#### Course Objectives: Upon successful completion of this course, students will be able to:

- 1. Relate chemical and physical structures to cellular processes, including the maintenance of homeostasis and cell signaling (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE4, GE5, GE6)
- 2. Compare and contrast essential metabolic pathways, including energy flow and organic molecule conversions (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE4, GE5, GE6)
- 3. Explain the cell cycle, and the cell division processes of mitosis and meiosis, as they apply to growth repair, maintenance, and reproduction (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE5, GE6)
- 4. Explain the central dogma of molecular biology and the basic concepts of gene expression in prokaryotes and eukaryotes (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE5, GE6)
- 5. Describe the basic principles of genetics and relate these to mechanisms of inheritance (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE5, GE6)
- 6. Explain the development of biotechnology in the context of ethical considerations, current applications, and global societal needs. (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE5, GE6)
- 7. Explain evolution as the unifying thread in biology (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE5, GE6)
- 8. Use the scientific process to investigate biological questions and make informed decisions. (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE4, GE5, GE6)
- 9. Research and present information on selected topics using various communication tools. (PG1, PG2, PG3, PG4, PG5 GE1, GE2, GE3, GE4, GE5, GE6)

# **BIOL 210 - Human Anatomy & Physiology**

4 Credits

Anatomy and Physiology 1 focuses on the structure and function of the human body. Homeostasis is the underlying theme. Related facts, principles, and concepts of chemistry and biochemistry are integrated where needed for increased understanding. This part of the course will include study of the cell and tissues, and the following systems: integumentary, skeletal, nervous, endocrine, and muscular. The sequence of BIOL-210 and BIOL 211 is designed for premedical, paramedical, physical education, nursing, physical therapy, and other allied health students. (Fall, Spring & Summer Only) Three hours lecture. Three hours laboratory. Four Credits. Four billable hours.

GENERAL EDUCATION Category: Biological and Physical Sciences

**Pre-requisite(s):** BIOL 101 with a minimum grade of C or better within the last 5 years.

- 1. Develop a vocabulary of appropriate terminology to effectively communicate information related to the anatomy and physiology of the following body systems: integumentary, skeletal, nervous, endocrine, and muscular (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 2. Identify and describe the microscopic and macroscopic anatomy of the structures involved in the above body systems (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 3. Qualitatively and quantitatively describe the normal physiological functions of the structures involved in the above body systems, being sure to integrate basic knowledge of chemistry, mathematics, physics and cellular biology where appropriate (GE1, GE2, GE3, GE4, GE5, GE6, GE7)

- 4. Describe the correlation of the above body systems with each other and describe their contributions to homeostasis (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 5. Describe the diagnostic tools used in health care and how they are used to identify normal and abnormal anatomical and physiological abnormalities (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 6. Demonstrate an understanding of the relationship between anatomy and physiology by using anatomical knowledge to predict physiological consequences, and using knowledge of function to predict the features of anatomical structures (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 7. Demonstrate information literacy skills to access, evaluate, and use various scientific resources to approach and examine current health and medical issues from an evidence-based perspective (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 8. Demonstrate laboratory procedures used to examine anatomical structures and evaluate physiological functions. (GE1, GE2, GE3, GE4, GE5, GE6, GE7)
- 9. Interpret graphs of anatomical and physiological data and calculate relevant physiological values (GE1, GE2, GE3, GE4, GE5)

#### BIOL 211 - Human Anatomy & Physiology 2

#### 4 Credits

Anatomy and Physiology 2 provides further study of the structure and function of the human body. The circulatory, lymphatic/immune, respiratory, excretory, digestive, and reproductive systems will be emphasized in this term with an emphasis on structure and function from the microscopic to the macroscopic level of organization. (Fall, Spring & Summer Only) Three hours lecture. Three hours laboratory. Four Credits. Four billable hours.

Pre-requisite(s): BIOL 210 with a minimum grade of C or better within the last five years.

- 1. Develop a vocabulary of appropriate terminology to effectively communicate information related to the anatomy and physiology of the following body systems: cardiovascular, lymphatic immune, respiratory, digestive, urinary, and reproductive.
- 2. Identify and describe the microscopic and macroscopic anatomy of the structures involved in the above body systems.
- 3. Qualitatively and quantitatively describe the normal physiological functions of the structures involved in the above body systems, being sure to integrate basic knowledge of chemistry, mathematics, physics and cellular biology where appropriate.
- 4. Describe how the different body systems function together to maintain homeostasis.
- 5. Describe the various tools used in health care and how they are used in the diagnosis and cure of pathological conditions.
- 6. Demonstrate an understanding of the relationship between anatomy and physiology by using anatomical knowledge to predict physiological consequences, and using knowledge of function to predict the features of anatomical structures.
- 7. Demonstrate information literacy skills to access, evaluate, and use various scientific resources to approach and examine current health and medical issues from an evidence-based perspective.
- 8. Use proper and safe laboratory procedures to examine the physiological functions of the cardiovascular, respiratory, and urinary body systems.
- 9. Use the appropriate quantitative skills to calculate and interpret physiological data.

#### CHEM 105 - Principles of General Chemistry 1

#### 4 Credits

General Chemistry 1 is the first semester course for students who intend to major in chemistry, life sciences and other areas that require a minimum of one semester and/or one year of college chemistry. Topics covered in the course include study of matter and measurements, atoms, molecules and ions, stoichiometry involving chemical reactions, solution stoichiometry, thermochemistry, the electronic structure of the atom, periodic properties, chemical bonding, molecular geometry, and the physical behavior of gases. Advanced Placement Exam (Chemistry with a score of 4) accepted. (*Fall, Spring & Summer Only*) Three hours lecture. Three hours laboratory. Four Credits. Four billable hours.

GENERAL EDUCATION Category: Biological and Physical Sciences

**Pre-requisite(s):** CHEM 101 (or high school chemistry with advisor signature) and MAT 099, with a minimum grade of C or better, plus eligibility for ENGL 101.

# Course Objectives: Upon successful completion of this course, students will be able to:

- 1. Solve various chemistry problems using the metric system, using proper mathematical and problem-solving skills with the aid of non-graphing and non-programmable calculators. (PG1, PG2 GE2)
- 2. Describe the nature of matter and atomic theory and its relevance. (PG1 GE2, GE3)
- 3. Apply proper nomenclature and formulas in writing balanced reactions and solve stoichiometric problems. (PG1, PG2 GE2, GE3)
- 4. Qualitatively and quantitatively describe and predict the reactions of chemicals, and perform thermochemistry analyses of these reactions. (PG1, PG2 GE3)
- 5. Describe and analyze the behavior of gases, and apply the laws that govern these behaviors in problem-solving. (PG1, PG2 GE2)
- 6. Explain and interpret the periodic trends of elements and electron configuration. (PG1, PG2 GE2, GE3)
- 7. Predict and formulate the bonding of atoms and molecular geometry of compounds. (PG1, PG2 GE2, GE3)
- 8. Perform laboratory explorations to reinforce their understanding of chemical concepts learnt in the lectures, mastery in proper measuring techniques and laboratory report writing skills and relate lab experience to applications of chemistry in daily life. (PG2, PG4 GE1 GE3, GE4, GE7).

#### CIS 101 - Intro. to Computer Information Systems

#### 3 Credits

Introduction to Computer Information Systems is designed to prepare students to focus upon the technological demands of the 21st century workforce. Students use creative thinking, problem solving, effective communication, team building, and analyze social and ethical issues related to computers, networks, and the Internet. Students gain hands-on experience through examples and team-based scenarios using Web/Internet applications, current word processing, spreadsheet, database, presentation applications, and the current Windows operating system. CLEP (Information Systems with a score of 50) accepted. *Three hours lecture. Three Credits. Three billable hours.* 

Pre-requisite(s): MAT 095 and ENG 001.

- 1. Explain the value and usefulness of digital literacy in society and as a tool in careers. (General Education Goal 1, 4, 6, 7 BUAD Program Goal 1)
- 2. Understand basic computer terminology and concepts including: computer types, application and system software, data and information, system units, input and output hardware, storage, telecommunications and networks, security information systems and the information processing cycle. Apply this terminology to research and discuss factors involved in a new electronic device computer purchase or upgrade. (General Education Goal 1, 4, BUAD Program Goal 2, 4)
- 3. Identify and discuss ethical issues including identity theft and related information technology issues and their effect on society and business. Establish proper ethical courses of action and methods for securing personal information. (General Education Goal 1, 2, 4, 7, Program Goal 2)
- 4. Perform Internet research using appropriate search methods and analyze the validity and appropriateness of Web resources. Cite sources according to MLA APA guidelines. (General Education Goal 1, 2, 4, BUAD Program Goal 2, 4, 6)
- 5. Discuss and apply appropriate methods for communicating via the Internet e-mail and sending attachments, social networks, blogs, and etc. (General Education Goal 1, 4, BUAD Program Goal 4)
- 6. Utilize the current Windows operating system to effectively perform maintenance functions, locate devices, and efficiently organize files and folders. (General Education Goal 1, 4, BUAD Program Goal 4)
- 7. Use word processing software to prepare documents including: memos, business letters, resumes, flyers, research papers and web pages. (General Education Goal 1, 2, 4, 5, BUAD Program Goal 2, 4, 6, OFFC Program Goal 3)
- 8. Use spreadsheet software to create workbooks, perform calculations and analyze data represented as graphs. (General Education Goal 1, 2, 3, 4, BUAD Program Goal 4, 6, OFFC Program Goal 4)
- 9. Use database software to plan, design, enter edit data, inquire and create data reports. Gather, process, and evaluate this information.(General Education Goal 1, 2, 4, BUAD Program Goal 4, OFFC Program Goal 6)
- 10. Use presentation software to plan, design, create and present a professional presentation. (General Education Goal 1, 4, BUAD Program Goal 3, 4, OFFC Program Goal 5)
- 11. Understand the importance of teamwork in organizations, and develop techniques to work more effectively in teams. (General Education Goal 7)
- 12. Edit and incorporate rich media such as images, animation, audio and video into documents, spreadsheets, and presentations, and demonstrate integration using different applications. (General Education Goal 4, BUAD Program Goal 4, OFFC Program Goal 3, 4, 6)
- 13. Use cloud computing concepts and other Internet applications to create and share information. (General Education Goal 4, BUAD Goal 4)

#### **COMM 105 - Introduction to Speech Communication**

3 Credits

Introduction to Speech Communication examines speech communication concepts, both in theory and in practice. Students will develop strategies for effective intrapersonal, interpersonal, group, and public communication. The goal is to develop effective listening and speaking skills in a variety of contexts. *Three hours lecture. Three Credits. Three billable hours.* 

GENERAL EDUCATION Category: Arts and Humanities

**Pre-requisite(s):** eligibility for or completion of ENGL 101.

# Course Objectives: Upon successful completion of this course, students will be able to:

- 1. Develop presentations that inform, persuade, and entertain a variety of audiences. (GE1)
- 2. Explore topics for presentations by considering personal experiences, interacting with others, and conducting academic research. (GE4)
- 3. Use critical thinking strategies to craft focused, well-organized speeches or presentations. (GE3)
- 4. Engage in verbal and non-verbal communication that fosters positive interactions within relationships, small group settings, and or communities. (GE7)
- 5. Use supplementary materials (visual, audio, and tactile materials) to enhance meaning and to engage audience members. (GE6)
- 6. Apply techniques to manage communication anxiety. (GE7)
- 7. Document sources of information for major presentations in MLA-style. (GE4)
- 8. Select language suitable to the audience and occasion. (GE1)

# **ENGL 101 - College Writing**

3 Credits

Develop critical reading, thinking, and writing skills for the purpose of exploring ideas and issues relevant in a participatory society. Use an inquiry-based writing process to engage in ethical public discourse. Develop sound perspectives supported by evidence; identify and address bias; consider the needs and interests of different audiences. Must earn a final grade of C or higher to meet General Education requirements for graduation, to transfer course to a 4-year institution, or to enroll in any class for which ENGL-101 is a prerequisite. (Fall, Spring and Summer) Three hours lecture. Three Credits. Three billable hours.

GENERAL EDUCATION Category: English Composition

**Pre-requisite(s):** eligibility for ENGL-101.

#### Course Objectives: Upon successful completion of this course, students will be able to:

- 1. Discover topics relevant in a participatory society through a process of critical reading, academic research, and personal observation (GE3, GE4, GE7)
- 2. Explore and use facts, expert opinions, representative samples, statistics, and personal testimony to develop nuanced points-of-view (GE3, GE4)
- 3. Identify and avoid bias, misinformation, and logical fallacies (GE3, GE4)
- 4. Craft thesis statements that make a point or a claim that are sustained by descriptions, examples, comparisons, explanations, and analysis (GE1)
- 5. Write to engage in civil discourse about shared issues with diverse audiences (GE1, GE7)
- 6. Organize ideas to foster clarity and coherence (GE1, GE3)
- 7. Document sources of information in MLA-style (GE4)
- 8. Write clear and complete sentences without errors that impede meaning (GE1)

# MATH 123 - Precalculus Pt. 1 College Alg. With Trig

4 Credits

Precalculus Part 1: College Algebra with Trigonometry provides the foundation to be successful in chemistry, physics, engineering and advanced mathematics. The precalculus and calculus sequences are

intended for future mathematics/science/ engineering majors. Topics include relations and functions, including composite functions and inverse functions; analysis of polynomial, power, rational, exponential, logarithmic, and trigonometric functions and their graphs; right triangle trigonometry, and Laws of Sines and Cosines. Problems will be solved through analytic, numerical, and graphical approaches with an emphasis on setting up and solving relevant application problems. Students who need to take MATH 135 - Calculus of a Single Variable 1, will need to complete both Precalculus Part 1 and Precalculus Part 2 in a two-semester-long sequence, or the rigorous one-semester MATH 130 course. It is strongly recommended that a student enroll in MATH-123 within one semester of completing MAT 099. Credit by exam available. Graphing calculator required (Fall, Spring and Summer) Four hours lecture. Four Credits. Four billable hours.

**GENERAL EDUCATION Category: Mathematics** 

**Pre-requisite(s):** eligibility for <u>ENGL 101</u>, plus exemption/completion of <u>MAT 099</u> with a minimum grade of C or better or a satisfactory score on the math placement exam. It is strongly recommended that a student enroll in MATH-123 within one semester of completing <u>MAT 099</u>.

# Course Objectives: Upon successful completion of this course, students will be able to:

- 1. Evaluate, graph, and identify the domain, range and intercepts of polynomial, power, rational, exponential, logarithmic, and trigonometric functions. (GE2)
- 2. Identify and graph shifts, reflections, stretches, and shrinks of functions. (GE1, GE2, GE3, GE5)
- 3. Find a composition of two functions, and find the domain of a composite function. (GE2)
- 4. Find inverses of functions analytically and graphically. (GE2)
- 5. Determine the zeros of polynomial functions using analytic techniques, such as synthetic division, and graphical techniques. (GE2)
- 6. Perform operations with complex numbers in standard form. (GE2)
- 7. Solve polynomial, rational, exponential, and logarithmic equations. (GE2)
- 8. Use trigonometric functions to solve right triangles. (GE2)
- 9. Apply the Law of Sines and the Law of Cosines to solve oblique triangles. (GE2)
- 10. Use polynomial, rational, exponential, logarithmic, and trigonometric function models to set up and solve application problems. (GE1, GE2, GE3, GE5)

#### **PSYC 101 - General Psychology**

3 Credits

Explore major psychological theories, concepts, and research. Discuss the biological bases of behavior, and survey related topics including cognition, human development, personality, social psychology, and mental health and treatment. Advanced Placement Exam (Psychology) and CLEP (Introductory Psychology) accepted *Three hours lecture. Three Credits. Three billable hours*.

GENERAL EDUCATION Category: Social and Behavioral Sciences

Pre-requisite(s): eligibility for ENGL 101.

- 1. Describe how psychologists in different subfields explain thought and behavior. (PG1,PG2,PG3;GE1,GE3,GE4,GE6)
- 2. Identify scholarly sources of information. (PG4; GE1,GE4,GE5)

- 3. Write concise, organized explanations of psychological subject matter. (PG2,PG3,PG5; GE1,GE3,GE4,GE5)
- 4. Apply psychological theories to everyday problems. (PG1,PG2; GE1,GE3,GE6)