

Kent City High School And Davenport University

2018 - 2019

Articulation Agreement





2018 - 2019

Annual Articulation Agreement Update and Review

Between

Davenport University

And

Kent City High School

Davenport University and Kent City High School agree to communicate annually curriculum changes that affect the agreed-upon relationship between articulated credit and to communicate the development of plans that might lead to further opportunities for credit articulation between the two establishments. Responsibility for communication related to this agreement will be given to the Principal at Kent City High School and the Director of Transfer Articulation at Davenport University or their designees.

This Annual Articulation Agreement Update and Review form documents that an annual update and review has occurred, whether in person, over the phone or via regular mail or e-mail, between the Principal at Kent City High School and the Director of Transfer Articulation at Davenport University or their designees. Any changes identified during this update and review have been incorporated into the articulation information for the 2018 - 2019 academic year. The articulation agreement as originally signed remains unchanged and in force.

SIGNATORIES TO THE ANNUAL ARTICULATION AGREEMENT UPDATE AND REVIEW

Bill Crane	Christopher L. Marx
Principal Kent City High School	Director of Transfer Articulation Davenport University



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KENT CITY HIGH SCHOOL

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ARTICULATION SUBMISSION FORM

This form is to be completed by the Kent City High School instructor after his/her review of course materials included in the Kent City High School and Davenport University Articulation Agreement.

PLEASE PRINT:	
	XXX-XX
Student's Name	Last four digits of SSN
Student's Address	Student's Home Kent City
City, State and Zip Code	Name of Instructor Making Recommendation

In order to be granted articulated credit the student must meet the following requirements:

- 1. The student must earn a 3.0 or higher in each course in order for credit to be articulated.
- 2. The student must also begin attending Davenport University within 27 months from the date of their Kent City High School graduation.
- 3. The instructor must sign the articulation submission form which verifies the student has met the necessary course work to be granted the articulated credit requested.

Credits articulated will become part of the total number of credits for program completion at Davenport University and will appear on the student's Davenport University transcript by course code and credit hours. No grade will be recorded. Tuition and fees will not be charged for articulated credits.

Instructions to complete this form: Complete instructor and student information above and place a check in the left-hand column on the following page for course (s) that are to be articulated. Please sign and date then mail both completed pages, along with a copy of the student's final official transcript to:

Registrar's Office, Davenport University, 6191 Kraft Avenue SE, Grand Rapids, MI 49512.

This form may also be emailed to Central.Registrar@davenport.edu or faxed to 616-732-1150.



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ARTICULATION SUBMISSION FORM

Check all that apply	Kent City High School Course	DU Course Number	Equivalent DU Course Name	Credit Hours
	Accounting – ACC301 and ACC302	ACCT201	Accounting Foundations I	4
	Human Anatomy & Physiology - SCI301 and SCI302	BIOL120	Essentials of Anatomy & Physiology	4
	Computer Science II – BIS201	BITS213	Microsoft Computer Applications: Desktop Publishing	3
	Chemistry II - CHM401 and CHM402	CHEM150 & CHEM150L	Foundations in Chemistry and Lab	4
	Computer Science I – BIS 101 and BIS102	CISP100	Introduction to Computers	3
	Computer Science III – BIS 301	CISP220	Web Page Applications	3
	World Cultures - HST201 and HST202	HIST112 SOSC241	Modern World History World Regional Geography	3
	American History HST301 and HST302	HIST212	Modern United States History	3
	Business Law - BUS201 and BUS202	LEGL210	Business Law Foundations	3
	Pre-Calculus - MTH301 <u>and</u> MTH302	MATH150	Pre-Calculus	4
	Physics - PHY301 and PHY 302	PHYS100 & PHYS100L	Applied Physics and Lab	3
	American Government - HST411	POLS111	American Government	3
	Psychology - HST311 and HST312	PSYC101	Intro to Psychology	3
	Spanish 1 and Spanish II – SPN101 and SPN102 and SPN201 and SPN202	SPAN121	Beginning Spanish II	3
	Spanish III and Spanish IV - SPN301 and SPN302 and SPN401 and SPN402	SPAN211	Intermediate Spanish I	3
	Spanish V - SPN411 and SPN412	SPAN221	Intermediate Spanish II	3

Instructor's Signature: I certify that I have examined the outco the student listed has successfully completed work at the seconds with a 3.0 GPA or higher. I therefore recommend that the stud (s) that I have checked above.	ary level that is essentially the same in content and depth
Instructor's Signature	Date
Additional Instructor or Authorized Signature	Date



ACCT201 Accounting Foundations I

Credit Hours:

4

This course is an introduction to accounting principles emphasizing the operation of a business as a sole proprietorship and covers the complete accounting cycle for merchandising and service entities. Partnership accounting is also covered. The application of computer technology to accounting processes is integrated into this course. Note: A grade of C or better is required to take the next course in the sequence. Co-requisite(s): BITS211 or CISP111 and MATH125

Learning Outcomes:

- Create financial statements including multi-step income statement, statement of owner's equity, classified balance sheet
- Analyze and record business events for sole-proprietorships and partnerships.
- Apply applicable Generally Accepted Accounting Principles
- Apply applicable proper accounting treatment and reporting of cash, receivables, inventory, plant assets and current liabilities.



BIOL120 Essentials Anatomy/Physiology

This course provides the student with the essential principles of anatomy and physiology including introductory chemistry concepts, cell and tissues studies and the structure and function of the following organ systems: integumentary, musculoskeletal, nervous, sensory, endocrine, respiratory digestive cardiovascular lymphatic impune urinary and reproductive systems

Credit Hours:

of the following organ systems: integumentary, musculoskeletal, nervous, sensory, endocrine, respiratory, digestive, cardiovascular, lymphatic, immune, urinary and reproductive systems. Students will study the human body using a system-by-system approach. There is an online \$85.00 software fee included in this course.

Learning Outcomes:

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

- Summarize the interrelationships among bodily systems
- Organize the anatomical components of each body system into a single functional entity
- Apply terminology of healthcare diagnostic techniques and interventions to the structures and functions of the human body
- Comprehend the concept of homeostasis and predict the outcome of deviations from the homeostatic state
- Identify and describe the structure and function of the cell and its components.
- Differentiate among the various types of tissues with respect to location, structure and function.
- Describe the structures of the integumentary system and its importance to health.
- Assess biomechanical systems and actions with respect to the bones, joints and muscles
 operating in those systems.
- Discuss how hormones function, their specific effects and predict the outcomes of deviation from homeostasis.
- Identify major structures of the special senses, their functions and appropriate regions of the brain where senses are identified.
- Describe the function and composition of blood.
- Outline blood flow through the cardiovascular system.
- Explain the structures and functions of the lymphatic system and how they relate to immunity.
- Describe the major processes that occur during digestive system activity throughout the digestive system structures.
- Explain the process of urine formation and how its composition relates to health.
- Identify the major organs of the male and female reproductive systems and the importance of each structure.

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- Apply knowledge-based research techniques (such as library, MEDLINE, web-based) and common software applications (such as word processing, spreadsheet, database, graphics) to facilitate learning outcomes.
- Write and orally present a paper on a selected topic in anatomy and physiology.



BITS213 Microcomputer Apps Desktop Pub

Students learn to design high-quality, marketable publications with industry-standard page composition software. Sample projects include newsletters, brochures, letterheads, business cards, and on-line materials. Publication design principles and software competency are integral components of this course. Students work on team projects and pre-press activities which are critical components of desktop publishing. Recommended Prerequisite(s): CISP100

Credit Hours:

Learning Outcomes:

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

- Create professional-quality publications such as newsletters, brochures, flyers, letterheads, and business cards using Adobe InDesign CS2.
- Apply software functions such as font and color attributes, page layout, and graphic features to produce attractive publications which adhere to standard design theory
- Plan and produce an original publication as a team effort
- Critique publications as to their effectiveness for the intended audience and purpose
- Critique publications on acceptable design practices by using appropriate publishing terminology

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CHEM150 Foundations of Chemistry

Credit Hours:

3

This course emphasizes general chemistry principles, including introductory topics in organic chemistry and biochemistry for the health professions student. Co-requisite(s): CHEM150L Prerequisite(s): MATH125

Learning Outcomes:

- Identify common units of measure and perform conversions between metric units
- Explain the organization of the periodic chart
- Describe the three states of matter and classification
- Explain general structure and nomenclature of atoms
- Predict types of bond formations between atoms
- Apply the mole concept in the stoichiometry of reactions and solutions.
- Balance chemical equations and use stoichiometric relationships to calculate product and reactant amounts.
- Compare and contrast types of reactions and predict the outcome of these reactions.
- List properties of acids and bases, the pH scale and buffers
- Explain the behavior of solutions, suspensions, and colloids
- Describe the properties of gases
- Explain nuclear decay, the concept of half-life and the diagnostic and therapeutic uses of ionizing radiation
- Compare types of molecules occurring in inorganic systems with those found in organic systems
- Identify and compare the structure and function of proteins, enzymes, carbohydrates and lipids
- Describe the role of nucleic acids in biochemical protein synthesis
- Write a paper on the application of chemistry in solving problems in the student's field of professional study



CHEM150L Foundations of Chemistry Lab

Credit Hours: 1

(2 contact hours) This course is an introduction to general chemistry laboratory principles and techniques that accompanies CHEM 150. Emphasis is placed on fundamental chemistry principles, organic chemistry, and biochemistry for the health professions student. A \$140.00 lab and insurance fee is charged in this course. Co-requisite(s): CHEM150 Prerequisite(s): MATH125

Learning Outcomes:

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

- Identify common units of measure and perform conversions between metric units
- Explain the organization of the periodic chart
- Describe the three states of matter and classification
- Explain general structure and nomenclature of atoms
- Predict types of bond formations between atoms
- Apply the mole concept in the stoichiometry of reactions and solutions.
- Balance chemical equations and use stoichiometric relationships to calculate product and reactant amounts.
- Compare and contrast types of reactions and predict the outcome of these reactions.
- List properties of acids and bases, the pH scale and buffers
- Explain the behavior of solutions, suspensions, and colloids
- Describe the properties of gases
- Explain nuclear decay, the concept of half-life and the diagnostic and therapeutic uses of ionizing radiation
- Compare types of molecules occurring in inorganic systems with those found in organic systems
- Identify and compare the structure and function of proteins, enzymes, carbohydrates and lipids
- Describe the role of nucleic acids in biochemical protein synthesis
- Write a paper on the application of chemistry in solving problems in the student's field of professional study

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CISP100 Introduction to Computers

Credit Hours: 3

This course introduces students to computer hardware, software, and terminology. Hands-on lab exercises will be extensive and focused on Internet usage, file management, and microcomputer software (word processing, spreadsheet, database, and presentation). Recommended Prerequisite(s): Keyboarding 25 wpm

Learning Outcomes:

- Create word processing documents with integrated objects including tables and pictures.
- Create proficient PowerPoint presentations.
- Create spreadsheets with multiple sheets and charts.
- Create a database and output reports based on database queries and filters.
- Demonstrate proficient file management on a PC.
- Discuss current ethical and legal issues related to computers in society.
- Locate and share information on the Internet (www and e-mail).
- Discuss current events specific to Information Technology.
- Define basic computer terms such as hardware, software, kilobyte, operating system, etc.
- Demonstrate proficient email skills including attachments.



CISP220 Web Page Applications

Credit Hours: 3

This foundational course in web page design and development provides hands-on experiences in HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript to develop, validate, link, publish, design, and maintain web pages using industry standard tools. Topics covered include HTML forms, responsive design, interactive content, media usage, cascading style sheets, and the publishing process. Prerequisite(s): CISP111

Learning Outcomes:

- Develop a working website using HTML, CSS, and JavaScript
- Implement inline, embedded and external style sheets
- Utilize various types of forms, lists, positioning, media and special effects
- Publish content to web servers using industry standard deployment tools
- Explain web accessibility initiatives and internationalization guidelines



HIST112 Modern World History

Credit Hours:

3

This course examines the history of the modern world, from the Renaissance through the present, with a special emphasis on the ways that the events of the past shape the present and future. Students will analyze the achievement of modern and post-modern world civilizations within the context of exploration, colonialism, independence movements, the new world order, and the increasing destructiveness of warfare. Population increase, ethnic solidarity, religious divisiveness, technological advances, and the rise and fall of ideologies are examined.

Learning Outcomes:

- Interpret major events and movements in the modern world from the Renaissance through the present.
- Analyze the chronology of significant events in human history.
- Compare the major components of multiple societies and understand his or her own society within that historical context.
- Discuss the historical construction of social, political, religious, economic, intellectual, technological, and artistic differences and similarities between groups and regions over time.
- Demonstrate an ability to identify and interpret a wide variety of primary sources including but not limited to personal and public documents, visual and oral representations, popular and material culture.
- Demonstrate an ability to analyze the historical method and construct a historical argument.



HIST212 Modern United States History

Credit Hours:

3

This course teaches essential concepts of U.S. history from the end of Reconstruction through the growth of modern America. Students learn how the United States came to prominence as a world power through the events of the two world wars. Students will also learn the genesis of world events leading to September 11, 2001, and will evaluate future directions in the light of the past.

Learning Outcomes:

- Interpret the major events and movements in the United States from 1865 through the present.
- Discuss the historical construction of social, political, religious, economic, intellectual, technological, and artistic differences and similarities between groups and regions over time.
- Analyze the chronology of significant events in U.S. history from 1865 through the present with special consideration of a global context.
- Demonstrate an ability to identify and interpret a wide variety of primary sources including but not limited to personal and public documents, visual and oral representations, popular and material culture.
- Demonstrate an ability to analyze the historical method and construct a historical argument.



LEGL210 Business Law Foundations

Credit Hours:

3

This survey course covers the fundamental principles of business law, including the legal system, dispute resolution, government regulation torts, and crimes affecting business, contracts, sales, and agency. Court decisions are used to encourage analytical thinking. Co-requisite(s): ENGL110

Learning Outcomes:

- Explain the legal environment in which business functions including methods of resolving disputes through the courts and alternative dispute mechanisms, the role of the US Constitution in the regulation of business and the power and function of administrative agencies in the regulation of business.
- Describe the elements of contract formation, performance, breach and remedies.
- Define various forms of business organization and analyze the advantages and disadvantages of each form of organization.
- Apply concepts of business ethics and social responsibility to business decisions.
- Differentiate criminal law from tort law.
- Recognize the role of regulation in the areas of employment and labor law, consumer protection, environmental and international law.
- Discuss agency relationships, how they are formed and the duties and liabilities of each party.
- Define and distinguish various types of intellectual property and explain the importance of each.



MATH150 Pre-Calculus

Credit Hours:

4

This course is designed to prepare students for the traditional calculus sequence. Topics include: brief review of algebra, solving equations and inequalities, systems of linear and nonlinear equations, the properties and graphs of relations and functions (including polynomial, radical, rational, logarithmic, exponential, and trigonometric), zeros of polynomial functions, trigonometry, conic sections, polar coordinates. Online sections of this course will have an \$85.00 ebook/MyMathLab fee included with the course. Prerequisite(s): MATH125

Learning Outcomes:

- Manipulate numbers and variables algebraically including the solving of equations.
- Given a function (linear, quadratic, polynomial, rational, logarithmic, exponential, or trigonometric), generate its graph including domain, range, intercepts, symmetries, asymptotes, and increasing/decreasing.
- Combine, translate, and manipulate (add, multiply, divide, compose, transformations, and find inverses) functions and generate the resulting graph.
- Demonstrate knowledge of logarithmic and exponential properties by simplifying expressions and solving equations.
- Use functions to build mathematical models in order to understand and predict physical phenomena.
- Demonstrate full understanding of trigonometric functions including definitions, trig
 values of standard angles, radian and degree measure, identities, graphs, inverses, and
 applications.
- Given a graph of a conic section (line, circle, ellipse, parabola, hyperbola), be able to determine its equation, and vice versa.
- Solve systems of two equations with two unknowns.
- Convert between polar and Cartesian coordinates and graph simple equations in polar coordinates.
- Demonstrate an elementary understanding of complex numbers including graphing, adding, and multiplying.
- Be acquainted with the central ideas of calculus (finding slopes of non-linear graphs and areas of regions under graphs via the process of taking limits).



PHYS100 Applied Physics

Credit Hours:

2

This course introduces the basic physical principles relating to particle motion, transfer of energy, energy fields and waves, rotational motion, thermodynamics, electromagnetism, material properties, and relativity. Students will apply these principles to physical systems in the virtual or physical laboratory setting. For online sections only, there is an \$85.00 fee which covers software and eBooks. Co-requisite(s): PHYS100L Prerequisite(s): MATH125

Learning Outcomes:

- Evaluate real world problems and identify potential solution methodologies to these problems using the scientific method.
- Apply physics concepts and equations to quantitatively solve real world problems.
- Analyze the contributions of physics to developments in the student's chosen degree program or profession.
- Formulate basic technical documentation by applying laboratory writing skills
- Explain the mechanics of Newton's laws, momentum, energy, and rotational motion.
- Explain the basic physical properties of matter, heat, wave motion, electromagnetism, and light.



PHYS100L Applied Physics Lab

Credit Hours: 1

(2 contact hours) This course introduces the basic physical principles relating to particle motion, transfer of energy, energy fields and waves, rotational motion, thermodynamics, electromagnetism, material properties, and relativity. Students will apply these principles to

electromagnetism, material properties, and relativity. Students will apply these principles to physical systems in the virtual or physical laboratory setting. A \$30.00 insurance fee is charged in this course. There is a \$140.00 lab supplies and insurance fee for this In-seat course. Corequisite(s): PHYS100 Prerequisite(s): MATH125

Learning Outcomes:

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

- Apply the scientific method to evaluate real world problems and identify potential solution methodologies to these problems.
- Apply physics concepts and equations to quantitatively solve real world problems.
- Analyze the contributions of physics to developments in the student's chosen degree program or profession.
- Apply laboratory writing skills to formulate basic technical documentation.
- Apply the mechanics of Newton's laws, momentum, energy, and rotational motion.
- Apply the basic physical properties of matter, heat, wave motion, electromagnetism, and light.

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POLS111 American Government

Credit Hours: 3

This course introduces students to American politics, the political process, and the evolution of American government at the national, state, and local levels. Students will explore national and state constitutions, civil rights, citizenship, suffrage, public opinion, political parties, and the electoral system. Students also evaluate the relationship between the individual and the government in the United States. Prerequisite(s): ENGL109

Learning Outcomes:

- Analyze the U.S. Constitution and its amendments
- Evaluate the various concepts of American federalism
- Evaluate the influence of interest groups on U.S. public policy
- Analyze American democracy and its political culture
- Analyze the concepts of civil liberty and civil rights
- Analyze U.S. domestic and foreign policy
- Understand current political issues facing the U.S. government
- Understand the U.S. electoral process, including the role of political parties



PSYC101 Introductory Psychology

Credit Hours:

This course provides an overview of psychological principles. Students learn basic theories and concepts to understand the dynamics of human behavior in a variety of settings.

Learning Outcomes:

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

- Identify and discuss early and contemporary theories of psychology
- Articulate an understanding of the major principles of sensation and perception
- Demonstrate an understanding of the relationship between psychological factors and physical health
- Evaluate and apply the theories of development across the lifespan
- Articulate the basic principles and major theories concerning learning, memory and cognition
- Discuss the symptomatology, etiology and treatment of psychological disorders
- Identify and discuss the major theories related to social psychology
- Demonstrate an understanding of the states of consciousness such as sleep, attention, dreaming and drug use
- Discuss and apply the major theories of motivation and emotion
- Identify and discuss the biological bases of behavior
- Identify the steps of the scientific method and explain how this method applies to psychology
- Demonstrate the ability to think critically and analytically in relation to psychological findings
- Demonstrate an understanding of the relationship between cultural/social factors on individual behavior

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SOSC241 World Regional Geography

Credit Hours:

3

This course teaches concepts and principles of world geography with particular emphasis on regions and places. Students learn the necessary geographic foundations to build an informed view of global current events. Students also learn to identify places and regions and understand the relationship of physical systems, human systems, and spatial patterns. Politics, economics, development, and war are explored in the global context, with specific examples. Students will study both the physical and cultural characteristics of the world as they develop insights into the relationship between environment and culture. Students learn to use maps that display and analyze data from the principle regions of the world.

Learning Outcomes:

- Evaluate the essential themes of world regional geography.
- Analyze regional problems and world events critically from a geographical perspective.
- Analyze the consequences of cultural phenomena, including agriculture, urbanization, colonization, economic development, political boundaries, and ethnic diversity, in regions of the world.
- Illustrate the importance of physical geography to cultural development.
- Apply the principles of world regional geography to gain further understanding of the roles and responsibilities of the major world powers in key global issues.
- Apply geographical insights to personal and professional contexts.
- Identify the major physical and cultural regions of the world, noting differences and similarities.



SPAN111 Beginning Spanish I

Credit Hours:

3

This first semester Spanish course is an introduction to listening, speaking, reading and writing skills, and Spanish-speaking cultures. The course recognizes the practical importance of language with special emphasis on speaking skills. It assumes no previous knowledge of the language. Students learn basic vocabulary and language structure, and begin exploring diverse segments of Spanish-speaking cultures. Note: A grade of C or better is required to take the next course in the sequence.

Learning Outcomes:

- Select the appropriate Spanish language elements necessary to communicate effectively at a beginning level
- Interpret at a beginning level both written and oral Spanish language messages
- Construct written and spoken Spanish sentences, paragraphs, and workplace messages using appropriate nouns, articles, verbs and adjectives.
- Compare the society and culture of diverse segments of Spanish-speaking peoples



SPAN121 Beginning Spanish II

Credit Hours: 3

This second semester Spanish course is a continuation of language skills and cultural understanding in SPAN111. The course recognizes the practical importance of language with special emphasis on speaking skills. Students expand their vocabulary, language structure, and continue examining diverse Spanish-speaking cultures. Prerequisite(s): Completion of SPAN111 with a C or above.

Learning Outcomes:

- Demonstrate a beginning level of competence in Spanish structure and usage.
- Comprehend spoken and written Spanish at a beginning level.
- Construct written and spoken Spanish language messages at a beginning level using appropriate grammatical units.
- Demonstrate knowledge of the society and culture of diverse segments of Spanishspeaking peoples.



SPAN211 Intermediate Spanish I

Credit Hours:

3

The third semester Spanish course is a continuation of language, skills and cultural understanding at an intermediate level. The course recognizes the practical importance of language with special emphasis on speaking skills. Students continue to expand their vocabulary and language structure, and deepen their understanding of diverse Spanish-speaking cultures. Note: A grade of C or better is required to take the next course in the sequence. Prerequisite(s): SPAN121

Learning Outcomes:

- Demonstrate an intermediate level of competence in Spanish structure and usage.
- Construct written and spoken Spanish sentences, paragraphs, essays and workplace messages using appropriate grammatical units.
- Comprehend spoken and written Spanish at an intermediate level.
- Demonstrate appreciation and understand the society and culture of diverse segments of Spanish-speaking peoples.