



COURSE DESCRIPTION GUIDE

2018-2019

**349 N. Oak Crest Drive
Wales, WI 53183**

High school of Health Sciences CEEB Test Code: 502-350

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English

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
01001.1	English/Language Arts I	1	9	None	English/Language Arts I (9th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.
01002.1	English/Language Arts II	1	10	English/Language Arts I	English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.
01005.1	AP English Language and Composition	1	11 & 12	English/Language Arts I	Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Language and Composition courses expose students to prose written in a variety of periods, disciplines, and rhetorical contexts. These courses emphasize the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes.
01006.1	AP English Literature and Composition	1	11 & 12	English/Language Arts I	Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Literature and Composition courses enable students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).
22110.1	AP Seminar	1	10	English/Language Arts I	Designed by the College Board to parallel college-level courses in critical thinking and communications, AP Seminar courses provide students with the opportunity to explore complex real world issues through cross-curricular lenses. Course topics vary and may include local, civic, or global issues and interdisciplinary subject areas. Courses typically emphasize research, communication, and critical-thinking skills to explore the issues addressed. Students may also examine source materials such as articles and other texts; speeches and personal accounts; and relevant artistic and literary works.
22154.1	AP Research	1	11 & 12	AP Seminar	AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research questions. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

Health Science

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
14055.1	Emergency Medical Technician	2	11 & 12	None	EMT is a hands on class with a mix of book work and lectures. The content of the class focuses on the basic level of care that an emergency medical technician would perform. The class moves through the content and material to first understand, then put it into practice. Once there is a solid understanding, students are then allowed to go on ride alongs and clinicals. Ride alongs and clinicals offer the opportunity for the student to gain the necessary patient contacts to be able to become an emergency medical technician. Course Fee: \$100
14001.1	Exploration of Health Care Occupations	0.5	11 & 12	None	Exploration of Health Care Occupations courses expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, dental care, administrative services, and lab technology). These courses provide experiences in several of these occupational clusters, along with information and knowledge related to the health care industry as a whole.
15152.0	Fire Fighting	0.5	9, 10, 11, 12	None	This is an introduction to a class called Firefighter 1 that you can take at a post-secondary school such as WCTC. Intro to Firefighter 1 teaches you about what it is like to be a real life firefighter. Held at Lake Country Fire Department Station 2 in Nashotah, you show up at 8am and depart at 11am. You will be given a full set of firefighter turnout gear that will be yours throughout the period of the workshop. You will be taught the basics of becoming a firefighter, involving search and rescue, air ventilation, radio communication, and the different jobs of each firefighter on the grounds. Course Fee: \$10
72104.1	Global Community Service	0.5	12	None	The Global Community Service course affords students the opportunity to serve the global community and learn about health care in other countries. Students will learn about a country outside the U.S., prepare for a volunteer project in that country, then travel to the country to carry out the expected work. Past volunteer projects were completed in Costa Rica and have included building hydroponic planting beds with wheelchair accessibility for use with occupational therapy at a nursing home, building a handwashing station at a disadvantaged elementary school, preparing a dental hygiene and handwashing presentation, and assisting in any way requested while abroad. Students also investigate the health care system of the country to compare and contrast with the health care system in the U.S.
14998.1	Health Care Sciences—Workplace Experience	1	11 & 12	None	Health Care Sciences—Workplace Experience courses provide students with work experience in the health care industry. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.
14298.1	Health Sciences—Workplace Experience	1	11 & 12	None	Health Sciences—Workplace Experience courses provide students with work experience in fields involving the health sciences. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

Health Science

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
03098.1	Medical Research I	2	11 & 12	None	Medical Research (the SUPREMES program) allows students to perform research alongside a principal investigator and graduate students. The first semester consists of being trained on common lab procedures and learning how to craft a research manuscript. During the second semester, students are sent into their chosen labs to complete a research project. Findings at the end of the year are shared through a poster presentation and a written manuscript.
03098.2	Medical Research II	2	11 & 12	None	Medical Research II provides students with the opportunity to continue working alongside a principal investigator and graduate students at the Medical College of Wisconsin. Students are sent into their chosen labs to complete a research project. Findings at the end of the year are shared through a poster presentation and a written manuscript.
14051.1	Nursing C-NA	1	10, 11, 12	None	CNA (Certified Nursing Assistant) is a medical outreach program housed at the Aurora Medical Center Summit partnered with HS2. This outreach program is available to be taken in either the Spring or Summer. The program allows students to engage with patients and experience the medical field in a hands on environment. The class finishes with two weeks of clinicals and a final class exam that is required to be passed in order to set up a state assessment that tests the individual's skills through a written and practical exam.
14254.1	Part. Topics Health Sc-1st Responders	0.5	11 & 12	None	The Emergency Medical Responder class was a class that ran from end of April until the beginning of June. We receive the opportunity to learn how to become EMR certified, CPR certified and learn how to help patients during a very critical time of their life. We got to do labs and real life scenarios at two of the local fire departments. We had to take tests to test our knowledge but we received a textbook that we could work in. We got to learn what to do when arriving on scene as the first person and how to care for someone carefully and safely. Course Fee: \$25
03212.1	Scientific Research and Design	1	10, 11, 12	None	Scientific Research and Design (the DRIVE program) allows students to research at the Medical College of Wisconsin under the wing of professionals once a week for a full school year. Students conduct scientific research on a specific topic of choice, lab-based or community-based, in a small group consisting of both High School of Health Sciences and Milwaukee Academy of Science students. In May, the students attend Community Engagement week at MCW to present their findings in the form of a poster, in hopes of possible funding to take their project off the ground.
14098.1	Therapeutic Svcs - Wkpl Exp	0.5	11 & 12	None	Therapeutic Services—Workplace Experience courses provide students with work experience in fields related to therapeutic services. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

Math

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
02052.1	Algebra I	1	9	None	Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations. Math Fee: \$15
02072.1	Geometry	1	9 & 10	Algebra I	Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles. Math Fee: \$15
02056.1	Algebra II	1	10, 11, 12	Geometry	Algebra II course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents. Math Fee: \$15
02055.1	Intermediate Algebra	1	10, 11, 12	Geometry	This is an introductory level course designed to review and develop fundamental concepts of arithmetic, algebra, geometry, and statistics. Emphasis will be placed on computational skills and applications of rational numbers; problem solving skills with ratios, proportions, and percent; basic principles and application of algebra, geometry, graphing, and statistics; measurement skills in U.S. Customary and Metric Systems; and the use of calculators as a tool. Math Fee: \$15
02201.1	Probability and Statistics	0.5	10, 11, 12	None	Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.
02110.1	Pre-Calculus	1	11 & 12	Algebra II	Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity. Math Fee: \$15
02203.1	AP Statistics	1	9,10,11,12	Geometry	Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

Math

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
02124.1	AP Calculus AB	1	12	Pre-Calculus	Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. These courses introduce calculus and include the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of-change problems); and integral calculus (including antiderivatives and the definite integral).

Physical Education

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
08001.1	Phy Ed I	0.5	9,10,11,12	None	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
08001.2	Phy Ed II	0.5	9,10,11,12	Phy Ed I	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
08001.3	Phy Ed III	0.5	9,10,11,12	Phy Ed II	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
08001.4	Phy Ed IV	0.5	9,10,11,12	Phy Ed III	Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.
8009.1	Weight Lifting	0.5	9,10,11,12	None	Weight Training courses help students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning.

Health

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
08051.1	Health	0.5	9	None	Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Science

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
03051.1	Biology	1	9	None	Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. Course Fee: \$5
03056.1	AP Biology	1	10, 11, 12	Biology	Adhering to the curricula recommended by the College Board and designed to parallel collegelevel introductory biology courses, AP Biology courses stress basic facts and their synthesis into major biological concepts and themes. These courses cover three general areas: molecules and cells (including biological chemistry and energy transformation); genetics and evolution; and organisms and populations (i.e., taxonomy, plants, animals, and ecology). AP Biology courses include college-level laboratory experiments. Course Fee: \$15
03105.1	Conceptual Chemistry	1	10	Biology	Conceptual Chemistry is a practical, nonquantitative chemistry course designed for students who desire an understanding of chemical concepts and applications.
03101.1	Chemistry	1	10	Biology	Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. Course Fee: \$10
03108.1	Chemistry II	1	10, 11, 12	Chemistry	Chemistry II, usually taken after a comprehensive initial study of chemistry, Chemistry II covers chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry. Course Fee: \$5
03106.1	AP Chemistry	1.5	11 & 12	Chemistry	Following the curricula recommended by the College Board, AP Chemistry courses usually follow high school chemistry and second-year algebra. Topics covered may include atomic theory and structure; chemical bonding; nuclear chemistry; states of matter; and reactions (stoichiometry, equilibrium, kinetics, and thermodynamics). AP Chemistry laboratories are equivalent to those of typical college courses. Course Fee: \$15
03161.1	Conceptual Physics	1	9	None	Conceptual Physics courses introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.
03151.1	Physics	1	9	None	Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

Science

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
03155.1	AP Physics	1	10, 11, 12	Physics	AP Physics B courses are designed by the College Board to parallel college-level physics courses that provide a systematic introduction to the main principles of physics and emphasize problem solving without calculus. Course content includes mechanics, electricity and magnetism, modern physics, waves and optics, and kinetic theory and thermodynamics. Course Fee: \$15
03003.1	Environmental Science	1	10	None	Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.
03201.1	Particular Topics in Science	0.5	9,10,11,12	None	The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.
03053.2	Anatomy and Physiology I	1	9, 10, 11, 12	None	Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.
03053.3	Anatomy and Physiology II	1	9, 10, 11, 12	None	An extension of Anatomy and Physiology I.

Social Science

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
04004.1	AP Human Geography	1	9	None	Following the College Board's suggested curriculum designed to parallel college-level Human Geography courses, AP Human Geography introduces students to the systematic study of patterns and processes that have shaped the ways in which humans understand, use, and alter the earth's surface. Students use spatial concepts and landscape analysis to examine human social organization and its environmental consequences and also learn about the methods and tools geographers use in their science and practice.
04256.1	AP Psychology	1	11 & 12	None	Following the College Board's suggested curriculum designed to parallel a college-level psychology course, AP Psychology courses introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals, expose students to each major subfield within psychology, and enable students to examine the methods that psychologists use in their science and practice.
04307.1	Particular Topics in Philosophy	0.5	9,10,11,12	None	the Study of a particular topic in philosophy, usually of a post modern distinction. this is most often Phenomenology and / or Existentialism with a great in depth focus touching in applied ethics.
04109.1	Particular Topics in U.S. History (Medical)	1	9, 10, 11, 12	None	These courses examine a particular topic in U.S. History, such as particular time periods in the history of the United States, or they may focus on the history of particular U.S. regions rather than provide an overview of the subject.
04065.1	Particular Topics in World History (Medical)	1	9, 10, 11, 12	None	These courses examine a particular topic in World History, such as particular time periods in history, or they may focus on the history of particular regions rather than provide an overview of the subject.
04306.1	Philosophy	0.5	9,10,11,12	None	Philosophy courses introduce students to the discipline of philosophy as a way to analyze the principles underlying conduct, thought, knowledge, and the nature of the universe. Course content typically includes examination of the major philosophers and their writings.
04254.1	Psychology	0.5	11 & 12	None	Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.
04151.1	U.S. Government	0.5	12	None	U.S. Government—Comprehensive courses provide an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. These courses may examine the structure and function of state and local governments and may cover certain economic and legal topics.

Social Science

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
54061.1	World Area Studies	0.5	12	None	World Area Studies courses examine the history, politics, economics, society, and/or culture of one or more regions of the world, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. This course may focus takes an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, these courses may emphasize one particular country (Costa Rica, Guatemala, Peru) rather than a region or continent. This is General or Regular Course.
04001.2	World Geography	1	9,10,11,12	None	World Geography courses provide an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

Elective

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
10157.1	AP Computer Science	1	9, 10, 11, 12	None	Following the College Board's suggested curriculum designed to mirror college-level computer science courses, AP Computer Science courses provide students with the logical, mathematical, and problem-solving skills needed to design structured, well-documented computer programs that provide solutions to real-world problems. These courses cover such topics as programming methodology, features, and procedures; algorithms; data structures; computer systems; and programmer responsibilities.
03108.2	Food Science	1	9,10,11,12	None	Food Science focuses on a particular topic within the study of chemistry, the science of food.
22003.1	Individualized Learning Seminar (study skills)	.5		None	This competency-based course is designed for students who require additional academic or functional skill development. Students will collaborate with staff to determine the module of study that is most appropriate for them. Options include: Self Direction & Resiliency, Continuous Learning, Collaboration, Creative & Critical Thinking, Engaged Citizenship, Self-Managed Learning, Social Learning, and Postsecondary Transition. Students must demonstrate competency across 8 different competencies within a module in order to earn .5 credit. Upon completion of a module, students may move into an additional module for further credit earning opportunities. IEP team recommendation required.
10152.1	Intro Computer Science	1	9, 10, 11, 12	None	Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data management, graphics, and text-processing.
08017.1	Kinesiology	1	9, 10, 11, 12	None	Kinesiology will serve as an introduction into the study of human movement. This course will incorporate musculoskeletal anatomy and physiology, metabolism, biomechanics, joint motions, levers, origins and insertions of muscles, muscle actions, cardiorespiratory and muscular endurance, muscular strength and power/force production, muscular flexibility, and body composition as responses to acute and chronic exercises. Students will participate in both classroom and laboratory environments and activities incorporating scientific experimentation and measurement before, during, and after exercise. The course culminates with a look into the field of exercise and sport science as well as a survey of careers available to those interested in pursuing the field of Kinesiology. Students will engage in physical activity to increase their understanding of course content
14154.1	Medical Terminology	1	9, 10, 11, 12	None	In Medical Terminology courses, students learn how to identify medical terms by analyzing their components. These courses emphasize defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within health care professions.

Elective

Course Number	Course	Total Course Credit Value	Grade Recommendations	Prerequisites	Description
05116.1	Music History - Appreciation	0.5	9,10,11,12	None	Music History/Appreciation courses survey different musical styles and periods with the intent of increasing students' understanding of music and its importance in relation to the human experience. Music History/Appreciation courses may focus on how various styles of music apply musical elements to create an expressive or aesthetic impact.
08053.1	Nutrition and Advocacy	1	9, 10, 11, 12	None	Community Health courses cover not only personal health topics (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on), but also more general health issues. These additional topics may include (among others) available community resources, fundamentals of the nation's health care system, contemporary world health issues, and career options within the health field.