

# **Class Descriptions for Kent Core**

# LEGEND ENG = Department 21011 = Course Number College Writing II = Course Title (3) = Credit Hours

# **Composition**

## ENG 11011 College Writing I (3)

The study and practice of academic writing, including an introduction to rhetorical principles, the writing process, critical reading, research and technology.

## ENG 21011 College Writing II (3)

Continuation of college-level writing instruction with emphasis on research and inquiry, culminating in a lengthy written and/or multi-modal project. **Prerequisite**: ENG 11011

## **Mathematics and Critical Reasoning**

### CS 10051 Introduction to Computer Science (4)

An introductory, broad and hands-on coverage of aspects of computer science, including algorithms, problem solving, operating systems concepts, computer architecture, programming languages and modern applications. Three-credit lecture with one-credit lab.

## MATH 11008 Explorations in Modern Mathematics (3)

Topics from various branches of mathematics will be chosen to introduce the student to the wide varieties of ways in which mathematics affects everyday life.

## MATH 11009 Modeling Algebra (4)

Study of algebra arising in the context of real-world applications, including linear, polynomial, exponential and logarithmic models. Intended for students not planning to take calculus. No graduation credit for this course for students who have already passed MATH 11010. **Prerequisite**: minimum C (2.000) grade in MATH 10007 or MATH 10023

## MATH 11010 Algebra for Calculus (3)

Study of elementary functions and graphs, including polynomial, exponential and logarithmic functions; complex numbers; binomial theorem. No credit earned for this course if student earned credit for MATH 11011 or 12001.

Prerequisite: minimum C (2.000) grade in MATH 10007 or MATH 10024

## MATH 11012 Intuitive Calculus (3)

Designed to give an overview of differential and integral calculus to business and life-science majors. Does not include trigonometric functions. No credit earned for this course if student earned credit for MATH 12002.

Prerequisite: minimum C (2.000) grade in MATH 11010

# MATH 11022 Trigonometry (3)

Solution of triangles, trigonometric equations and identities. Students who have not taken a previous mathematics course at Kent State must see an academic advisor for placement. **Prerequisite**: minimum C (2.000) grade in MATH 11010

# MATH 12001 Algebra & Trigonometry (3)

Introduction to algebra and trigonometry including functions and graphs; polynomial and rational functions; exponential and logarithmic functions; angles and the trigonometric functions; graphs of trigonometric functions; trigonometric identities; inverse circular functions and trigonometric equations; and applications of trigonometry. No credit earned for this course if student earned credit for MATH 11010 or MATH 11022.

Prerequisite: minimum grade of B (3.000) or better in MATH 10024

# MATH 12002 Analytical Geometry & Calculus I (5)

Concepts of limit, continuity and derivative, and the indefinite and definite integral for functions of one real variable. Maximization, related rates, fundamental theorem of calculus. No credit earned for this course if student earned credit for MATH 12011 or 12012. **Prerequisite**: minimum C (2.000) grade in MATH 11010 and MATH 11022

## MATH 12011 Calculus with Pre- Calculus I (3)

Introduction to differential calculus with a review of algebra and trigonometry. Includes exponents, factoring, functions, graphs, tangent lines, limits, continuity, derivatives and related rates. No credit earned for this course is student earned credit for MATH 12002. **Prerequisite**: MATH 11022 and MATH 11010

## MATH 12012 Calculus with Pre- Calculus II (3)

Development of integral calculus and continued study of differential calculus. Includes curve sketching optimization fundamental theorem of calculus areas between curves, exponential and logarithmic functions. No credit earned for this course if student earned credit for MATH 12002. **Prerequisite**: MATH 12011.

## MATH 12002 Basic Mathematical Concepts I (4)

Development of the real number system and its sub-systems, open sentences, numeration systems, modular arithmetic and some number theory concepts. **Prerequisite**: minimum C (2.000) in MATH 10007 or any math course 10023 and higher

## MATH 12002 Basic Mathematical Concepts II (4)

Basic concepts of probability, statistics and geometry. **Prerequisite**: MATH 14001.

## **PHIL 21002 Introduction to Formal Logic**

An introduction to the diverse methods and subject matters of philosophy. Primary philosophic sources from varied philosophical traditions focus on at least three philosophic areas.

## **Social Sciences**

## ANTH 18210 Introduction to Cultural Anthropology (3) (G)

Exploration of human diversity through the analysis of world cultures.

### ANTH 18420 Introduction to Archeology (3) (G)

Archaeology is the study of the human past using material remains. The themes of time change and human diversity will be emphasized as students learn about ancient societies and how they teach us about ourselves.

### CACM 11001 Introduction to Conflict Management (3) (D)

Introduces key elements of conflict management theory and practice such as active listening, assertion, collaborative problem solving, principled negotiation, mediation and nonviolent conflict intervention. These are essential "life skills" useful in personal, social and professional contexts. Includes conflict communication skills development and practice.

### ECON 22060 Principles of Microeconomics (3)

Principles and policies affecting prices, including factor incomes, under alternative market structures. Tools developed to examine social problems, including poverty, crime, pollution and international relations.

Prerequisite: MATH 10007 or one course from MATH 10023-49999

### ECON 22061 Principles of Macroeconomics (3)

Principles and policies affecting aggregate production, consumption, investment and government expenditures. Includes role of money, the banking system, inflation, unemployment and economic growth.

Prerequisite: ECON 22060.

### **GEOG 17063 Introduction to Geography (3)**

Emphasizes processes which generate diverse global human and environmental patterns. Interaction of geographical elements as expressed in spatial organization of cities, land use, and cultural political regions.

#### GEOG 17063 World Geography (3) (G)

Examination and comparison of geographic conditions in different regions of the world. This course stresses inter-relationships between people and resources within and between regions and countries.

#### GEOG 17064 Geography of the United States and Canada (3) (D)

Analysis of the spatial patterns of significant human and physical characteristics and interpretation of the major regions within the two nations.

## GEOG 22061 Human Geography (3) (G)

Emphasizes processes that generate diverse global human and environmental patterns. Interaction of geographical elements as expressed in spatial organization of cities, land use and cultural and political regions.

## GERO 14029 Introduction to Gerontology (3) (D)

An interdisciplinary approach to the study of the aging process.

# JMC 20001 Media, Power, and Culture (3) (D)

Critical understanding of mass media in historical, ideological, economic and cultural contexts. Examines what forces influence media and how media influence consumers. Not open to journalism and mass communication pre-majors or majors.

## JUS 26704 Issues in Law and Society (3)

General treatment of the legal system with special emphasis on its origin, structure and functional consequences on issues and problems in modern society.

## POL 10004 Comparative Politics (3) (G)

This course introduces the different institutional structures of governance (e.g., parliamentary versus presidential systems) in a range of different states for different types of regimes (e.g. democratic and authoritarian) and at the international level.

## POL 10100 American Politics (3) (D)

This course covers the basic elements of politics at the national level in the United States: structures, processes, behaviors, institutions, policies. Special emphasis is given to conflicting theories of power as they apply to different economic, sexual and racial groups.

## POL 10500 World Politics (3) (G)

A practical, theoretical introduction to a study of systematic patterns in international relations. Includes analysis of rules, instruments, processes, decision- making factors, conflict resolution.

# PSYC 21211 General Psychology (3) (D)

Introduction to the scientific approach to understanding human behavior and mental processes such as emotions, perceptions and cognitions. Topics may include personality, social and environmental factors, biological aspects of behavior and the experience of emotion and psychological disorders.

## PSYC 21211 Child Psychology (3) (D)

A review of the data, concepts and theories of psychology that contribute to the understanding of child development from conception to age 14. Prerequisite: PSYC 11762.

# PSYC 21211 Psychology of Adjustment (3) (D)

A review of theories, concepts and data that contribute to our understanding of human adjustment. Topics may include the following: personality, stress and coping, transitions from adolescence to adulthood, psychological disorders and psychotherapy. Prerequisite: PSYC 11762

## PSYC 22221 Multicultural Psychology (3) (D)

Examination of areas of psychology upon which diversity issues have a bearing and focused study of psychological issues relevant to African-American, Asian- American, Hispanic/Latino American and

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American Indian groups. **Prerequisite**: PSYC 11762.

## SOC 12050 Introduction to Sociology (3) (D)

Scientific approach to understanding social interaction, institutions and organization.

## SOC 22778 Social Problems (3) (G)

Contemporary American and global social problems and issues are analyzed from sociological perspectives. Several cases are used to illustrate the emergence, development and decline of problems in social context.

## Humanities in Arts & Sciences

## CLAS 21404 The Greek Achievement (3) (G)

A study of the cultural achievements of the ancient Greeks as displayed in their poetry, philosophy, history and art from the Homeric period through the New Testament.

## CLAS 21405 The Roman Achievement (3) (G)

A study of the cultural achievements of the ancient Romans as displayed in their literature and art from the Etruscans through the Christians.

## ENG 21054 Introduction to Shakespeare (3)

Study of representative plays and poems in the context of Shakespeare's age, his language and his cultural influence.

### ENG 22071 Great Books to 1700 (3)

Great works of world literature read in English, from ancient world to 1700, covering a wide range of ethnic and national voices, genres and traditions.

### ENG 22072 Great Books Since 1700 (3)

Great works of world literature read in English, from 1700 to today, covering a wide range of ethnic and national voices, genres and traditions.

### ENG 22073 Major Modern Writers: British and United States (3)

Introduction to British and U.S. writers of the 20th and 21st centuries; study of their works in their literary and cultural contexts.

### HIST 11050 World History: Ancient and Medieval (3) (G)

World history from early human societies through the mid-17th century.

## HIST 11051 World History: Modern (3) (G)

World history from mid-17th century to the present.

- HIST 12070 History of the United States: Formative Period (3) (D) A survey of United States history through 1877.
- HIST 12071 History of the United States: Modern Period (3) (D) A survey of United States history since 1877.

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## PAS 23001 Black Experience I: Beginnings to 1865 (3) (G)

Study and analysis of the African experience prior to, and following the arrival of Africans in the New World. Emphasis on North and South America, Africa and Caribbean.

## PAS 23002 Black Experience II: 1865 to Present (3) (D)

Covers the Black Experience from 1865 to the present, including events, ideas and persons in Africa, North and South America, and the Caribbean.

# PHIL 11001 Introduction to Philosophy (3) (G)

An introduction to the diverse methods and subject matters of philosophy. Primary philosophic sources from varied philosophical traditions focus on at least three philosophic areas.

# PHIL 21001 Introduction to Ethics (3) (G)

This course considers what constitutes ethics, not just which specific acts or act- kinds are ethical, using at least three primary philosophic sources from varied ethical traditions.

# PHIL 21020 Comparative Religious Thought I (3) (G)

Philosophic study of the religious impulse as it manifests itself variously in beliefs, practices and institutions ranging over times and cultures.

# PHIL 21021 Comparative Religious Thought II (3) (G)

Comparative exploration in depth of three religions, selected to represent a Western religion, an Eastern religion and a religion often overlooked in traditional comparative studies. **Prerequisite**: PHIL 21020.

## **Humanities in Communication & Information**

## COMM 26000 Criticism of Public Discourse (3) (D)

A critical examination of selected public speeches representing diverse viewpoints on a variety of historic and contemporary issues, emphasizing methods of evaluating public oral communication and the role of speechmaking in free societies.

Prerequisite: Sophomore standing.

# Fine Arts

# ARCH 10001 Understanding Architecture (3)

The nature of the built environment, its forms and functions are explored within the cultural contexts of ecology, technology, human behavior, symbolism, art, and history.

## ARCH 10011 Survey of Architectural History I (3)

History of architecture from Neolithic times through the 14th century. **Prerequisite**: Not open to architecture majors.

# ARCH 10012 Survey Of Architectural History II (3)

History of Western architecture from the Renaissance to the early 20th century. **Prerequisite**: ARCH 10011; not open to architecture majors.

## ARTH 12001 Art As A World Phenomenon (3)

An introduction to the history of art emphasizing analysis and interpretation of visual art forms. The course will also focus on the functions and meaning of Western and non-Western art traditions. Not counted toward requirements for art majors.

## ARTH 22006 Art History I: Ancient and Medieval Art(3)

Examination and interpretation of the major monuments of Western art and architecture from Paleolithic art to late Gothic art. The impact of non-Western traditions will be included as appropriate.

## ARTH 22007 Art History II: Renaissance To Modern Art(3)

Major movements and artists in painting, sculpture and allied arts of Europe and America from earl Renaissance in Italy until the present day. The impact of non-Western traditions will be included as appropriate.

## ARTH 22020 Art Of Africa, Oceania and The Americas (3)

Stylistic and historical investigation of the art and architecture of the traditional societies of Africa, Oceania and the Americas within an art historical and cross- cultural perspective.

### DAN 27076 Dance as an Art Form (3)

Survey of the various types, styles and functions of dance with emphasis on understanding dance as an art form and an expression of culture.

### MUS 22121 Music as a World Phenomenon (3)

An introduction to music as a world phenomenon. Study of selected art, folk and popular music from world cultures through live performances, tapes, films, video tapes and readings.

### MUS 22111 Understanding Music (3)

A listening approach for the understanding of Western art music, folk and jazz. Particular attention is paid to musical styles forms and compositional techniques as related to music history.

### THEA 11000 The Art of the Theatre (3)

Using the life-centered nature of theatre as a medium of analysis, this course is designed to develop critically engaged audience members who are aware of the impact, significance and historical relevance of the interconnection between culture and theatre performance.

### **Basic Sciences**

### ANTH 18630 Human Evolution (3)

Study of the scientific method and life's properties, emphasizing human biology. Topics include energy, genetics, reproduction, development disease, nutrition and physical fitness in humans.

### **ANTH 18631 Issues in Human Evolution (1)**

Laboratory study of primate and human anatomy; human paleontology; Mandelian, molecular and human genetics; and primate behavior, ecology and conservation. **Pre or corequisite**: ANTH 18630.

### BSCI 10001 Human Biology (3)

Study of the scientific method and life's properties, emphasizing human biology. Topics include energy, genetics, reproduction, development disease, nutrition and physical fitness in humans.

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### **BSCI 10002 Life on Planet Earth (3)**

Explores the fascinating breadth of life on Earth including the unique ecology and survival strategies of animals, plants and microbes in their natural habitats.

## **BSCI 10003 Lab Experience in Biology (1)**

Introductory college-level laboratory in biology for non-majors. Two hours of laboratory per week. **Pre- or corequisite**: BSCI 10001 or 10002.

### **BSCI 20020 Biological Structure and Function (5)**

Basic design of human systems emphasizing the physiochemical and cellular bases of organ-system structure, function and development. Lecture four hours, laboratory three hours weekly.

## CHEM 10030 Chemistry in Our World (3)

A course for non-science majors that utilizes environmental and consumer topics to introduce chemical principles and develop critical thinking skills.

## CHEM 10031 Chemistry In Our World Laboratory (1)

Discovery-based experiments to introduce chemical principles and develop critical thinking skills. A course for non-science majors; includes chemistry that is related to environmental and consumer issues.

Pre- or corequisite: CHEM 10030.

## CHEM 10050 Fundamentals of Chemistry (3)

Basic concepts of chemistry (including atomic structure, chemical bonding and reactions) necessary for courses in elementary organic chemistry and physiological chemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10050; or CHEM 10054; or CHEM 10060 and 10061; or CHEM 10960 and 10961.

**Prerequisite**: ACT math score of 16; or MATH 10007 or MATH 10023 or MATH 10024 or MATH 11009 or MATH 11010 or MATH 11012 or MATH 12002 or MATH 12011 or MATH 12021.

## CHEM 10052 Introduction to Organic Chemistry (2)

Chemistry of organic and biological molecules necessary for the study of physiological chemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10052; or CHEM 10054; or CHEM 20481 and 20482; or CHEM 30481 and 30482. **Prerequisite**: CHEM 10050 or 10060.

## CHEM 10053 Inorganic and Organic Laboratory (1)

Laboratory with experiments covering material from CHEM 10050, 10052 and 10054. Students may only receive credit toward graduation for one of the following courses: CHEM 10053; or CHEM 10062 and 10063; or CHEM 10960 and 10961.

Prerequisite: CHEM 10050 or 10054. Corequisite CHEM 10052.

## CHEM 10054 General & Elementary Organic Chemistry (5)

A course covering the basic concepts of general, inorganic and organic chemistry necessary for the study of physiological chemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10050; or CHEM 10052; or CHEM 10054; or CHEM 10060 and 10061; or CHEM 10960 and 10961; or CHEM 20481 and 20482; or CHEM 30481 and 30482.

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**Prerequisite**: ACT math score of 16; or MATH 10007 or MATH 10023 or MATH 10024 or MATH 11009 or MATH 11010 or MATH 11012 or MATH 12002 or MATH 12011 or MATH 12021.

## **GEOG 21062** Physical Geography (3)

Introduction to the study of the spatial characteristics of the Earth's physical environment, including how humans interact with it. Topics include weather and climate, vegetation, soils, ecosystems, landforms and land-formation processes, human impacts on Earth systems and human societal adaptations to the physical environment.

## GEOG 21063 Physical Geography Lab (1)

Practical experience examining physical geographic processes, including the study and manipulation of map projections, Earth-sun relationships and experiments relating to the atmosphere, biosphere, lithosphere and hydrosphere. **Corequisite**: GEOG 21062.

### **GEOL 11040 Earth Dynamics (3)**

Application of basic concepts and theories of Earth science to the interpretation of Earth materials and dynamic processes (erosion, sedimentation, volcanism, continental drift).

### **GEOL 11041 Earth Dynamics Laboratory (1)**

Laboratory study of minerals, rocks, aerial photos, topographic maps and geologic maps. **Pre- or corequisite**: GEOL 11040.

### GEOL 11042 Earth History (3)

Application of basic concepts and theories of Earth science to the interpretation of the origin and evolution of the solar system, the Earth, the structures of the crust and life.

### **GEOL 11043 Earth History Laboratory (1)**

Laboratory study of fossils, sedimentary rocks and geologic maps in the framework of interpreting Earth history.

**Pre- or corequisite**: GEOL 11042.

### **GEOL 21062 Environmental Geology (3)**

Application of geology to environmental problems, including natural resource extraction, water supply, pollution, waste disposal, landslides, floods and land use planning. Field trips. Lecture three hours weekly.

### GEOL 21080 Oceanography (3)

Introduction to geological, physical, chemical and biological nature of the oceans.

## NUTR 23511 Science of Human Nutrition (3)

Basic concepts and principles in the science of human nutrition, energy balance and weight control, individual nutrient needs, diet selection, nutrition related metabolism and physiological functions, nutritional diseases and current human nutrition controversies.

### PHY 11030 Seven Ideas that Shook the Universe (3)

Description of major revolutionary physical concepts and their implications for understanding the physical universe. Not counted toward physics major.

## PHY 13001 General College Physics I (4)

Principles of mechanics, heat and sound. Three-hour lecture, one-hour recitation. **Pre- or corequisite**: MATH 11022 or 12001 or 12002 or 12021. **Corequisite**: PHY 13021.

## PHY 13021 General College Physics I Laboratory (1)

Introductory lab to accompany PHY 13002 or PHY 13012. **Corequisite:** PHY 13002 or PHY 13012.

### PHY 13002 General College Physics II (4)

Principles of electricity and magnetism, optics and modern physics. Three hours lecture and one hour recitation weekly.

Prerequisite: PHY 13001 or PHY 23101. Corequisite: PHY 13022.

### PHY 13022 General College Physics II Laboratory (1)

Introductory lab to accompany PHY 13002 or PHY 13012. **Corequisite:** PHY 13002 or PHY 13012.

### PHY 13011 College Physics I (2)

Principles of classical physics, primarily mechanics. Three-hour lecture and one-hour recitation weekly. This is a flexibly scheduled course that meets concurrently with PHY 13001 for the first half of the regular term.

Pre/corequisite: MATH 11022 or 12001 or 12002 or 12012 or 12021. Corequisite: PHY 13021.

### PHY 13012 College Physics II (2)

Principles of classical physics, primarily electricity and magnetism. Three-hour lecture and one-hour recitation weekly. This is a flexibly scheduled course that meets concurrently with PHY 13002 for the first half of a regular term.

Prerequisite: PHY 13001 or PHY 13011 or PHY 23101.

### PHY 12201 Technical Physics I (3)

Introduction to principles of physics: mechanics. Two-hour lecture/recitation and two- hours laboratory weekly.

**Prerequisite**: MATH 11010; and pre- or corequisite: MATH 11022 or MATH 12001 or MATH 19001.

### PHY 12202 Technical Physics II (4)

Introduction to principles of physics: fluids, thermodynamics, electricity and magnetism. Three-hour lecture/recitation and two-hour laboratory weekly. **Prerequisite**: PHY 12201.

### PHY 21040 Physics in Entertainment and the Arts (3)

Descriptive introduction to physics underlying selected forms of art and entertainment. Examples are drawn from music, visual arts, and communications media. Not counted toward requirements for major in Physics.

### PHY 21041 Physics Entertainment Arts Lab (1)

Laboratory component of PHY 21040, two hours weekly. **Pre- or corequisite: PHY 21040** 

## PHY 21430 Frontiers in Astronomy (3)

Modern description of astrophysical observations, the results of these observations, and the physical principles based on them. Not counted toward requirements for major in Physics.

## PHY 21431 Frontiers in Astronomy Lab (1)

Laboratory component of PHY 21430 Frontiers in Astronomy. **Pre- or co-requisite:** PHY 21430.

## **Additional Courses**

## COMM 15000 Introduction to Human Communication (3)

An inquiry into the nature and function of human communication in interpersonal, group and public contexts.

## PHIL 11009 Principles of Thinking (3)

The place of argument in reasoning and the place of reasoning in thinking are explored through a concentration on argument--its structure, expression, function and limits.