

# Foundation Requirements

*GEOG 102, 151 are now GEO 102, 151.*

*ZOOL 141, 141L, 142, 142L are now PHYL 141, 141L, 142, 142L.*

*Appropriate course substitutions for the AA degree may be made with the prior written approval of both the appropriate Division Chair and the Dean of Arts and Sciences.*

## Written Communication (FW) 3 cr.

### ENG 100: Composition I

Provides practice in producing substantial compositions at the college transfer level for courses across the curriculum. Engaging in research activities, students evaluate and integrate sources into their compositions. Following a recursive writing process, they analyze the rhetorical, conceptual, and stylistic demands of writing for various purposes and audiences. Students apply the principles of expository writing and produce compositions that have clear ideas, adequate support, logical organization, and correct sentence structure. Students become proficient language users, independent learners, and thoughtful members of an academic community.

Credits: 3

Prerequisites: Placement in ENG 100 or ENG 22 or ENG 24 with a grade of CR or Permission of Division Chair in Language Arts

### ENG 100E: Composition I

For non-native speakers of English only. Provides practice in producing substantial compositions at the college transfer level for courses across the curriculum. Engaging in research activities, students evaluate and integrate sources into their compositions. Following a recursive writing process, they analyze the rhetorical, conceptual, and stylistic demands of writing for various purposes and audiences. Students apply the principles of expository writing and produce compositions that have clear ideas, adequate support, logical organization, and correct sentence structure. Students become proficient language users, independent learners, and thoughtful members of an academic community.

Credits: 3

Prerequisites: Placement into ENG 100E or ESL 21 and ESL 22 with a grade of CR or Approval from the Language Arts Division Chair

Recommended Prep: Experience in using computers for writing

## Symbolic Reasoning (FS) 3 cr.

No course with FS designation effective Fall 2020.

## Quantitative Reasoning (FQ) 3 cr.

Students entering Fall 2018 and thereafter must take FQ.

### BUS 250: Applied Mathematics in Business

BUS 250 provides students with problem-solving and quantitative reasoning skills essential in business. Beginning with a review of relevant concepts from algebra, it covers topics in the mathematics of finance, calculus emphasizing business applications, probability, and introductory statistics. BUS 250 uses a financial calculator and spreadsheets.

Credits: 3

Prerequisites: MATH 103 with a grade of C or better or Placement in MATH 135 or equivalent or instructor consent

## HIT 120: Intro to Healthcare Data Management & Analytics

This course introduces students to the concepts and terminology used in the field of healthcare data management and analytics. Students will be introduced to general data characteristics and exploratory data analysis techniques and be asked to evaluate data dictionaries and data sets. Students will be introduced to Structured Query Language (SQL) in relation to healthcare data. Exploratory data analysis will focus on exploring health data to understand the data's underlying structure and variables to develop intuition about the data set, to consider how the data set came into existence.

Credits: 3

Prerequisites: BUS 101 with a grade of C or better or equivalent or Instructor consent

Program: [Health Information Technology](#)

Recommended Prep: ICS 129

## HIT 176: Health Information Statistics

This course covers principles of statistics with applications to healthcare science. Statistical methods include collection, maintenance, organization, presentation, interpretation, and quantitative analysis of data from primary and secondary sources. Terminology, examples and assignments from healthcare science are incorporated throughout the course.

Credits: 3

Prerequisites: HIT 102 with a grade of C or better or concurrent enrollment

Program: [Health Information Technology](#)

Recommended Prep: BUS 101, Mathematical skills and practice consistent with Common Core High School standards

## ICS 141: Discrete Mathematics for Computer Science I

This course includes logic, sets, functions, matrices, algorithmic concepts, mathematical reasoning, recursion, counting techniques, and probability theory.

Credits: 3

Prerequisites: Placement in MATH 135 or Instructor consent

Program: [Information & Computer Science](#)

## ICS 241: Discrete Mathematics for Computer Science II

Includes program correctness, recurrence relations and their solutions, divide and conquer relations, graph theory, trees and their applications, Boolean algebra, introduction to formal languages and automata theory.

Credits: 3

Prerequisites: ICS 141 with a grade of C or better or Instructor consent

Program: [Information & Computer Science](#)

## MATH 100: Survey of Mathematics

MATH 100 includes a variety of selected mathematical topics designed to acquaint students with examples of mathematical and quantitative reasoning that demonstrate the beauty, power, clarity, and precision of mathematics. The core course content includes deductive, numeric, symbolic, graphical and statistical algorithms and reasoning. MATH 100 is not intended as, and does not qualify as, a prerequisite for advanced mathematics courses.

Credits: 3

Prerequisites: MATH 75 or MATH 82X with a grade of CR or Concurrent enrollment in MATH 78 or MATH 78B or Placement in MATH 100

Recommended Prep: Qualification for or completion of ENG100 or equivalent. Basic computer, internet, and keyboarding skills.

## MATH 103: College Algebra

Functions, graphs and their properties are studied by generalizing and interpreting techniques initially introduced in elementary algebra. Simplification techniques are used to define, simplify, and derive elementary properties of linear, quadratic, rational, exponential and logarithmic functions. Equation, system and inequality solving techniques are used to determine the domain and range and analyze the nature of the roots and intersection points of functions and graphs. Quantitative interpretation and practical application of functions and graphs are included throughout the course.

Credits: 3

Prerequisites: MATH 82X with a grade of CR or Concurrent enrollment in MATH 88 or Appropriate MATH placement

Recommended Prep: Basic computer, internet, and keyboarding skills.

## MATH 112: Math for Elementary Teachers II

This course is the second in a two-course sequence (MATH 111 - MATH 112) designed to give elementary education students a depth of understanding necessary to teach mathematics at that level. The emphasis will be on understanding, representing and communicating mathematical ideas and procedures; solving problems; and reasoning mathematically. MATH 112 further develops operations, and covers geometry, introductory probability and statistics, and additional companion topics. Due to potential variation in topic sequencing, it is recommended that students needing both MATH 111 and MATH 112 take the courses sequentially and from the same institution.

Credits: 3

Prerequisites: MATH 111 with a grade of C or better or concurrent enrollment in MATH 111, only when the concurrent MATH 111 section and the MATH 112 section are offered as sequential part-of-term courses

## MATH 115: Introduction to Statistics and Probability

This course utilizes basic statistical topics including measures of central tendency and dispersion, classification of variables, sampling techniques, elementary probability, normal and binomial probability distributions, tests of hypothesis, linear regression and correlation in order to solve problems.

Credits: 3

Prerequisites: MATH 75 or MATH 82X with a grade of CR or Concurrent enrollment in MATH 78 or MATH 78B or Appropriate MATH placement

Recommended Prep: ENG 100 and basic computer, internet, and keyboarding skills

## MATH 135: Pre-calculus: Elementary Functions

This course investigates linear, quadratic, polynomial, rational, exponential, logarithmic functions, and related topics. The course is the first part of the precalculus sequence.

Credits: 3

Prerequisites: MATH 103 with a grade of C or better

Recommended Prep: ENG 100 and basic computer, internet, and keyboarding skills

## MATH 140: Pre-calculus: Trigonometry and Analytic Geometry

This course studies trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence.

Credits: 3

Prerequisites: MATH 135 with a grade of C or better

Recommended Prep: ENG 100 and basic computer, internet, and keyboarding skills

## MATH 140X: Accelerated Pre-calculus: Elementary Functions, Trigonometry, & Analytic Geometry

This course is designed to provide an accelerated path to Calculus to students who have a strong background in College

Algebra. Topics include the essential pre-calculus skills needed for success in calculus: functions, with special attention to polynomial, rational, exponential, logarithmic, and trigonometric functions; plane and analytic trigonometry; polar coordinates; and conic sections. Credit may not be earned for both MATH 140 and MATH 140X.

Prerequisites: MATH 103 with a grade of A or MATH 135 with a grade of C or better or Placement in MATH 140X

Recommended Prep: Basic computer, Internet, and keyboarding skills Qualification for or completion of ENG 100

## **MATH 241: Calculus I**

Introduces and develops basic calculus concepts and procedures: limits, continuity, derivatives, and an introduction to integration of single-variable algebraic and trigonometric functions. Derivations of algorithms and formulas, and proofs of important theorems, are included. Applications of differentiation and integration are introduced to bridge theory and practice. (Formerly MATH 205)

Credits: 4

Prerequisites: MATH 140 or MATH140X with a grade of C or better or Placement in MATH 241

Recommended Prep: Basic computer, internet, and keyboarding skills Qualification for or completion of ENG 100

## **PHIL 111: Intro to Inductive Logic**

promote drawing logical inferences when evidence leaves them unsure as to what is actually true. Application to the media's use of probabilities and statistics, and the way many academic disciplines use these strategies to analyze and present data will provide concrete contexts for applying inductive principles and reasoning strategies.

Credits: 3

Recommended Prep: MATH 75, PHIL 110

## **Global Multicultural Perspectives (FG) 6 cr.**

Select two courses, each from a different group.

### **Global Multicultural Perspectives Group A**

#### **ANTH 151: Emerging Humanity**

Introduction to human biological evolution and the archaeology of culture in the world prior to 1500 CE.

Credits: 3

Prerequisites: Placement in ENG 100

#### **ART 175: Survey of Global Art I**

This course is an introduction to the major developments in Global Art from prehistory to 1500.

Credits: 3

#### **HIST 151: World History to 1500**

A global and historical survey focusing on human societies and cross-cultural interactions to 1500 CE. Emphasis is given to broad relationships and trends within the historical process and to political, religious, economic, and social changes.

Credits: 3

### **Global Multicultural Perspectives Group B**

## ANTH 152: Culture and Humanity

This course is an anthropological examination of the development of cultures in the post-1500 world. We will study the impact of globalization on some cultural traditions in different regions, including Africa, the Americas, Asia, Europe, and Oceania. The emphasis is on a multicultural and global perspective of cultural diversity and change.

Credits: 3

Prerequisites: Placement in ENG 100

## ART 176: Survey of Global Art II

This course will examine artistic production of major societies from 1500 to the present.

Credits: 3

Recommended Prep: Basic computer, internet, and keyboarding skills.

## BUSN 277: International Business Protocol

Presents international business protocol differences among countries and develops the skills to identify and understand these differences in a business environment.

Credits: 3

Prerequisites: Placement in ENG 100 or Instructor consent

Program: [Business Technology](#)

## BUSN 279: International Business Analysis

Analyzes international corporate environments and their impact on business dynamics. The focus is on business practices in the Asian/Pacific region; but other regions may also be included.

Credits: 3

Prerequisites: Placement in ENG 100

Program: [Business Technology](#)

## GEO 102: World Regional Geography

This course is an introductory survey in world regional geography. Each of the world's major cultural regions are examined with emphasis on geographic aspects of contemporary economic, political and environmental conditions. (Formerly GEOG 102)

Credits: 3

Recommended Prep: Placement in ENG 100

## HIST 152: World History Since 1500

A global and historical survey focusing on human societies and cross-cultural interactions since 1500 CE. Emphasis is given to broad relationships and trends and to the political, religious, economic and social changes most relevant to contemporary society.

Credits: 3

## POLS 150: Introduction to Global Politics

Foundations in global politics from political, historical, and multicultural perspectives.

Credits: 3

Recommended Prep: ENG 22, ENG 24

## **Global Multicultural Perspectives Group C**

### **GEO 151: Geography and Contemporary Society**

This is an introductory course in human geography. It examines patterns of population and migration, cultural diffusion and change, globalization, economic development, political systems, agriculture and urbanization, with an emphasis on the ways human activities shape the natural environment. (Formerly GEOG 151)

Credits: 3

Recommended Prep: Placement in ENG 100

### **MUS 107: Music in World Cultures**

Folk, popular, and art music from major regions of the world, with emphasis upon Asia and the Pacific; representative styles and regional characteristics.

Credits: 3

Recommended Prep: Basic computer, internet, and keyboarding skills.

### **REL 150: Introduction to the World's Major Religions**

A survey of the origins, teachings, practices, and present-day situation of the world's major religions: Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Shinto, Taoism, and indigenous traditions.

Credits: 3