



General Education Program

**Reference Guide
2018-2019**

Student Development and Enrollment Services
University of Central Florida

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LEGEND

- ◆ **State Core** = One (1) Florida State Core course is required per each of the Five (5) Foundations
- GRW** = Gordon Rule writing class (must earn C- or better; four courses required)
- GRM** = Gordon Rule math class (must earn C- or better; two courses required)
- CL** = Civic Literacy

GEP SUCCESS TIPS

Attend class regularly and on time
 Read course syllabus to understand professor's expectations
 Go to class prepared
 Participate in class discussion and activities
 Keep up with class material:
 Do not wait until the last minute to complete assignments or study
 Keep up with assigned readings
 College papers should not be written the night before the due date
 Take notes during lectures
 Form or join a study group to help review material over the semester
 Utilize professor's office hours for additional help and assistance
 Utilize campus resources for assistance

Student Academic Resource Center (SARC)

Howard Phillips Hall 113

College Level Skills Handouts
 Learning Skills Consultants
 Free Peer Tutoring
 Supplemental Instruction
 Extended Hours during Exam Week

SARC Lab Hours:

Mon-Thurs: 8am - 7pm; Fri: 8am - 5pm

Visit website for Tutoring & SI Sessions:

www.sarc.sdes.ucf.edu

University Writing Center (UWC)

Colbourn Hall 105

Individual Writing Consultations
 Peer Tutoring
 Online Resources for Writing
 Print Resources

Visit website for alternate locations, hours,
 and to schedule an appointment:

www.uwc.cah.ucf.edu

Math Lab

Mathematical Sciences Building 113

Math Tutoring in: Finite Mathematics, Explorations in Mathematics, College Algebra, Trigonometry, Business Calculus, Precalculus, Mathematics for Calculus, Calculus I, II, III, and Differential Equations

Visit Website for Lab Hours:

<https://sciences.ucf.edu/math/mathlab/>

Knights Academic Resource Services

Directory of academic resources and services.

<http://kars.sdes.ucf.edu/>

Note:

Students should check their class syllabus for additional resources offered by each instructor.

Some instructors schedule office hours for their graduate assistants to help students.

COMMUNICATION FOUNDATIONS: GEP 1

ENC 1101	English Composition I	◆ State Core & GRW	Credit Hours: 3
Description:	Students will be challenged to think, write, and speak about a wide range of ideas from multiple perspectives. There will be some major essays and many short assignments to help the student become better writers. Expository writing with emphasis on effective communication and critical thinking will be included. Writing topics are based on selected readings and student experiences.		
Core Topics:	Students will gain a better understanding of the writing process, and will focus on topics such as how writers and readers construct texts, effective writing processes and practices, how discourse communities shape writing and understanding writing in the university.		

COMMUNICATION FOUNDATIONS: GEP 2

ENC 1102	English Composition II	GRW	Credit Hours: 3
Description:	Focus on extensive research in analytical and argumentative writing based on a variety of readings from the humanities. Emphasis is on developing critical thinking and diversity of perspectives.		
Core Topics:	Shape “voice” in the public arena with controversial issues, develop research skills, develop critical reading and thinking skills and analyze, interpret, and evaluate printed text.		
Prerequisites:	ENC 1101		

COMMUNICATION FOUNDATIONS: GEP 3

COM 1000	Introduction to Communication	Credit Hours: 3
Description:	Communication is the foundation of human relations. This course examines various contributors to the human communication process including the influence of language on thought, the symbolic nature of communication, and the importance of context. It also investigates the process of abstracting, human perception, epistemological strengths and weaknesses, the influence of classification on communication, the communication of racism, cultural influences on communication, and various other aspects of human communication.	
Core Topics:	A first look at communication, the process, components of apprehension, genetic contributors, strategies for effective presentations, language, listening, organizational and intercultural communication, ethical and nonverbal communication, persuasion, communication in relationships, and the communication of demagoguery.	
SPC 1603C	Fundamentals of Technical Presentations	Credit Hours: 3
Description:	The main goal of this course is to help the student become a more effective communicator, particularly through the medium of public speaking, with emphasis on the demands peculiar to the technology-related professions. Presenting information-rich subjects to a non-technical audience will be emphasized.	
Core Topics:	Students will understand the process of communication, develop oral speaking skills, preparation, and delivery; use visual aids effectively including the use of presentation software and hardware.	
SPC 1608	Fundamentals of Oral Communication	Credit Hours: 3
Description:	The primary goal of this course is give the student experience in public speaking. There is an emphasis on the theoretical foundations of oral communication, extemporaneous delivery and appreciation for cultural diversity of audiences. Students will give multiple speeches during the semester.	
Core Topics:	Learn the basic principles of human communication and become a more effective communicator. Students will understand and practice ethical communication and the impact of recent technology on oral communication.	

HISTORICAL & CULTURAL FOUNDATIONS: GEP 4

NOTE: Historical Foundations can be taken **out of sequence** and **do not need to be taken as a common pair**.

AMH 2010	US History 1492-1877	GRW	Credit Hours: 3
Description:	Survey of the main events and trends of American History to 1877. Focuses on the contributions of Native Americans, Africans and Europeans. Explains the foundations of our democracy and the progress made on civil rights and liberties.		
Core Topics:	Sharpen comprehension of the main processes that shaped our nation. Engage analytical and critical thinking skills in explaining the significance of the most important historical events.		
EUH 2000	Western Civilization I	GRW	Credit Hours: 3
Description:	A survey of western civilization from ancient to 1648.		
Core Topics:	Ancient Greeks, Romans, Hebrew & Christian Tradition, Medieval Studies, the Renaissance, Reformation.		
EUH 2001	Western Civilization II	GRW	Credit Hours: 3
Description:	A survey of western civilization from 1648 to the present.		
Core Topics:	Early modern Europe, Age of Revolution, World Wars and Totalitarianism, Contemporary World.		
HUM 2020	Encountering the Humanities	◆ State Core	Credit Hours: 3
Description:	The range of ideas, research methods, and approaches to scholarship, critical reflection, and creative work in the humanities.		
Core Topics:	Classical, Multi-Cultural, Critical Humanities		
HUM 2210	Humanistic Tradition I	GRW	Credit Hours: 3
Description:	Interdisciplinary, multicultural study of the arts and sciences contributed by diverse human traditions to world civilization. Focus is on ancient civilizations and the cultural heritage stemming from them.		
Core Topics:	The dawn of culture, Ancient Egypt, Rise of Ancient Greece, Judaism and the Rise of Christianity, Byzantine & Islamic Civilizations, Chinese and Japanese Civilizations, Civilizations of the Americas.		
HUM 2230	Humanistic Tradition II	GRW	Credit Hours: 3
Description:	Interdisciplinary, multicultural study of the arts and sciences contributed by diverse human traditions to world civilization. Focus is on modern civilizations and their contributions to the Global Village.		
Core Topics:	The Counter Reformation, the Baroque, the Enlightenment, Romanticism and Impressionism, Cubism & Surrealism, the Post-modern World.		
WOH 2012	World Civilization I	GRW	Credit Hours: 3
Description:	Topical approach to the study of the rise and decline of world civilizations from the first attempts to the great civilizations of medieval times.		
Core Topics:	Will look at the trial and error used to compare and contrast these civilizations.		
WOH 2022	World Civilization II	GRW	Credit Hours: 3
Description:	Rise of modern civilization from 1500 to the present, with an emphasis on the confrontation between the Western and non-Western spheres of civilization.		
Core Topics:	The emphasis is on the confrontation between the Western and non-Western spheres of civilization.		

HISTORICAL & CULTURAL FOUNDATIONS: GEP 5

ANT 2410	Cultural Anthropology: Global Perspectives, Local Contexts	Credit Hours: 3
Description:	An introduction to human diversity as exemplified among various cultures and ethnic groups.	
Core Topics:		
ARH 2050	History of Western Art I	Credit Hours: 3
Description:	Introduction to the history of art and art terms; a survey of ancient art forms from the Paleolithic period, the earliest civilizations of the Near East and Egypt, the Classical world, and the later medieval period preceding the Renaissance.	
Core Topics:	Painting, sculpture and architectural structures of the prehistoric period in Europe and the Near East; the iconography of power in Mesopotamia; art and life, including general stylistic periods of ancient Egypt, Greece, and Rome; late antiquity or the “early Christian period”; Byzantium, early Islam, and Gothic and Romanesque art. Religious symbolism and gender representation in each cultural period is discussed.	
ARH 2051	History of Western Art II	Credit Hours: 3
Description:	Introduction to the history of art and art terms. Overall view of the development of the visual arts from the proto-Renaissance in Italy to the Contemporary World. While surveying the major visual arts (painting, sculpture, architecture), leading artists are identified and examples of their work are discussed.	
Core Topics:	Renaissance, Baroque and Rococo art, Neoclassicism, Impressionism, Modernism, and Postmodernism	
NOTE:	ARH 2050 and ARH 2051 are <u>NOT</u> art appreciation. They are history courses in which the material (art) is discussed and analyzed from an academic/critical perspective.	
FIL 1000	Cinema Survey	Credit Hours: 3
Description:	An introduction to the art of film and to the crafts that are used to realize a director’s vision.	
Core Topics:	Basic film vocabulary and definitions. Production design, cinematography, editing, sound and music. The documentary approach.	
FIL 2030	History of Motion Pictures	Credit Hours: 3
Description:	History of motion pictures from 1895 to the present.	
Core Topics:	Students will be required to watch films, some of which include: Alfred Hitchcock, Charlie Chaplin, Sam Peckinpah and Stanley Kubrick.	
FIL 3036	Film History I	GRW Credit Hours: 3
Description:	Examines film history in a depth of detail and with rigor that is appropriate for majors in the subject. This course covers cinema history from 1895 to 1945.	
Prerequisites:	FIL 2030, FIL 2107 and Film BFA, World Cinema, or Cinema Studies major.	
FIL 3037	Film History II	GRW Credit Hours: 3
Description:	Film history in a depth of detail and with rigor that is appropriate for majors in the subject. This course covers from 1946 to the present.	
Prerequisite:	FIL 2030, FIL 2107 and Film BFA, World Cinema, or Cinema Studies major.	

HISTORICAL & CULTURAL FOUNDATIONS: GEP 5 (continued)

LIT 2110	World Literature I	GRW	Credit Hours: 3
Description:	Examine particular works of world literature, from the Homeric age until the Renaissance. The theme of the course addresses the issue of the nature of humanity, particularly our capacity for good and evil acts.		
Core Topics:	Students will reflect on the changes that have taken place during this period, from both international to individual perspectives and will read a wide range of texts written by men and women from many cultures and socio-economic classes. Students will try to 1) define what it is to live a good life according to the authors read and, 2) evaluate how relevant their perspective is from our vantage point in a new millennium.		
Prerequisites:	ENC 1102		
LIT 2120	World Literature II	GRW	Credit Hours: 3
Description:	There will be readings from a diversity of drama, fiction and some poetry by writers such as Moliere, Basho, Ibsen, Tagore, Kafka, Borges and Silko. Writers who write originally in a language other than English will be focused on.		
Core Topics:	We will reflect on the changes that have taken place during this period, from both international to individual perspectives. We will read a wide range of texts written by men and women from many cultures and socio-economic classes while focusing on literary evolution in the 20th century.		
Prerequisites:	ENC 1102		
MUH 2017	Survey of Rock Music		Credit Hours: 3
Description:	Rise of rock music to prominence and its impact on audience reception.		
Core Topics:	A broad outline the chronological history of rock and its related styles, basic precursor styles that led to rock, the most important sub-genres and styles, basic information about some of the most influential individuals of rock music, some of the more important songs. How rock music reflects some of the broad social and political issues of the recent past. Will improve your ability to listen critically to music.		
MUH 2019	American Popular Music 1840's to Present		Credit Hours: 3
Description:	Historical survey of American popular music-circa 1840 to present day		
Core Topics:	Foundational knowledge of American popular music, and general musical terminologies. Knowledge of concepts, styles, and theoretical principles in American popular music traditions. Analyze meanings of musical performances from diverse cultural and historical backgrounds. Demonstrate knowledge of how popular music developed in America from 1840-present.		
MUL 2010	Enjoyment of Music (non-music majors)	◆ State Core & GRW	Credit Hours: 3
Description:	Historical survey of "classical music", focuses on listening skills and terms that can be applied to most music. Several musical pieces dating from 1000-2001 will be studied; most of these will be classical, or art, music from Western European tradition; additional examples come from world and popular music.		
Core Topics:	Music of the middle ages, Renaissance, Baroque, classical, romantic, and 20th century. Composers such as Mozart, Bach, and Beethoven will be studied as well as some of their most famous and interesting works.		
MUL 2016	Evolution of Jazz		Credit Hours: 3
Description:	Survey of Jazz literature and performance.		
Core Topics:	Introduction to the main styles and performers from jazz history; included will be examples of New Orleans style jazz, Swing, and Bebop. Also introduces students to musical terminology and listening skills.		

HISTORICAL & CULTURAL FOUNDATIONS: GEP 5 (continued)

MUL 2720	Music of the World	Credit Hours: 3
Description:	Music in cross-cultural context; particular focus on non-Western music.	
Core Topics:	Music from different countries and its relationship to cultural meaning. Examples will include music from Asian and African countries. Also introduces students to musical terminology and listening skills.	
PHI 2010	Introduction to Philosophy	◆ State Core Credit Hours: 3
Description:	Introduction to major historical figures and issues in philosophy. The objective of this course is to provide a comprehensive view of some of the perennial questions of philosophy, to increase one's appreciation and understanding of the nature of philosophical inquiry and reasoning, and to provide significant development of critical and analytical ability.	
Core Topics:	The nature of being, substance and causality; the scope, nature, origin and limits of human knowledge; the good, the right, and theoretical and practical issues in morality; freedom, justice, rights; and the ordering of social and governmental institutions and practices. Metaphysics, epistemology, aesthetics, ethics, social philosophy, political philosophy. Understand the complex language of famous philosophers.	
REL 2300	World Religions	Credit Hours: 3
Description:	Provide an introductory overview of some of the world's most influential religions, their traditions and practices, as well as provide some insight into the philosophical background and implications of these religions. This course will increase a student's appreciation, understanding, and knowledge of the nature of the world's religions as well as to provide a means to understand the many practices, beliefs, traditions, and backgrounds that are interrelated among them.	
Core Topics:	Hinduism, Buddhism, Jainism, Sikhism, Taoism, Confucianism, Judaism, Christianity, Islam	
THE 2000	Theatre Survey	◆ State Core & GRW Credit Hours: 3
Description:	Focuses on how theatre is created: who is involved and what processes it goes through. Also looks at theatre's place in society through history. <u>It includes reading and discussion of plays and attending several productions both on campus and off.</u>	
Core Topics:	The audience, background and expectations, offstage and in the past, stage acting today, tragedy, musical theatre. <u>This is not an acting class and there is no acting required in this course.</u>	

HISTORICAL & CULTURAL FOUNDATIONS: GEP 6

Choose another course from either GEP 4 or GEP 5

Consider Gordon Rule Writing (GRW) and ◆ State Core requirements for your GEP 6 course selection.

MATHEMATICAL FOUNDATIONS: GEP 7

MAC 1105C	College Algebra	◆ State Core & GRM Credit Hours: 3
Description:	The algebraic and graphical properties of functions, including polynomials and rational, logarithmic and exponential functions. Intended for and will prepare students who plan to take higher level mathematics courses.	
Core Topics:	Inequalities, higher degree polynomials, graphs, rational, logarithmic, and exponential functions, systems of equations, matrices, determinants, induction.	
Prerequisites:	Appropriate score on the UCF Math Placement exam or MAT 1033C.	

MATHEMATICAL FOUNDATIONS: GEP 7 (continued)

MAC 2311C	Calculus w/ Analytical Geometry 1	♦ State Core & GRM	Credit Hours: 4
Description:	Analytic geometry; limits, continuity, differentiation of algebraic and trigonometric functions; applications of derivatives; integration and the fundamental theorem of calculus; applications of definite integrals. Not open to students with credit in MAC 2241.		
Core Topics:	Limit concept, continuity property, derivative of a function, mean value theorem, extreme value problems, related rate problems, definition of the definite integral, the fundamental theorem of calculus, area under a curve, and applications of the definite integral.		
Prerequisites:	Appropriate score on the UCF Math Placement Exam, or MAC 1140C and MAC 1114C, or combination of appropriate score on the UCF Math Placement Exam and MAC 1114 or MAC 1140C, or MAC 2147, or score of 3 or better on the Calculus AB Advanced Placement Exam.		
MGF 1107	Finite Math	♦ State Core & GRM	Credit Hours: 3
Description:	Introduction to logical structure, sets, probability, geometry, arrays, games. This course is intended for students who are not planning to take further courses in mathematics.		
Core Topics:	Logical structure, sets, probability, geometry, arrays and games.		
Prerequisites:	Appropriate score on the UCF Math Placement Exam or MAT 1033C		
MGF 1107	Explorations in Mathematics	♦ State Core & GRM	Credit Hours: 3
Description:	The beauty and utility of mathematics, including patterns and symmetry, voting strategies, and finance. Connections between math and music, art, architecture, and nature. For students not intending to take higher mathematics.		

MATHEMATICAL FOUNDATIONS: GEP 8

CGS 1060C	Introduction to Computers	GRM	Credit Hours: 3
Description:	Survey course covering the following topics. The application exercises give students hands-on experience with word processing, spreadsheets and presentation graphics. This course contains an Internet technology component that prepares students for other Internet driven coursework.		
Core Topics:	Email, Word, Excel, PowerPoint, web pages, and integrating various applications, also history, typical computer, number systems, control and data flow, peripheral components, memory devices effects of computers on society and applications of computers.		
NOTE:	Not open to Computer Science Majors. This is a Lecture/Lab course.		
CGS 2100C	Computer Fundamentals for Business	GRM	Credit Hours: 3
Description:	A web assisted course, designed to teach undergraduate students how to use computers (hardware and software) in business, including business applications, commercial packages and the Internet.		
Core Topics:	Computer, internet and network basics, computer hardware and software, file management, virus protection and backup, internet and LAN technology, web pages, web sites and e-commerce, digital media, computer programming, Microsoft Word, Excel, PowerPoint, Access and HTML.		
NOTE:	Not open to Computer Science Majors. This is a Lecture/Lab course.		

MATHEMATICAL FOUNDATIONS: GEP 8 (continued)

COP 2500C	Concepts in Computer Science	GRM	Credit Hours: 4
Description:	Fundamental concepts in program design, data structures, algorithms, analysis and a survey of topics in CS.		
Core Topics:	Binary math, data types and structures, algorithms and functions, basic computer architecture, recursion, transforming algorithms into code.		
Prerequisites:	Not open to Computer Science Majors.		
COP 3502C	Computer Science I	GRM	Credit Hours: 3
Description:	Problem solving techniques, order analysis and notation, abstract data types, and recursion.		
Core Topics:	Standard data structures, using standard algorithms to solve classical problems, analyzing the efficiency of solutions to problems and expanding knowledge of the C programming language.		
Prerequisites:	COP 3223 or EGN 211 and MAC 1105C		
COT 3100C	Introduction to Discrete Structures	GRM	Credit Hours: 3
Description:	Logic, sets, functions, relations, combinatorics, graphics, Boolean algebras, finite-state machines, Turing machines, unsolvability, computational complexity.		
Core Topics:	Probability, proof techniques, relations and functions, Number Theory, induction.		
Prerequisites:	MAC 2311C		
STA 2014C	Principles of Statistics	GRM	Credit Hours: 3
Description:	Introduction to statistical concepts in modern society. Basic principles, frequency distributions, measures of location and dispersion, probability, statistical inference.		
Core Topics:	Populations and samples, hypotheses, significance level, variables, error, displays, measures of central tendency, dispersion, box plots, distribution, standardized scores, proportions, parameter, critical values, confidence interval, regression, and goodness of fit.		
STA 2023	Statistical Methods I	◆ State Core & GRM	Credit Hours: 3
Description:	First methods course introducing probability and statistical inference, including estimation, hypothesis testing, binomial, Poisson, uniform, normal, and exponential distributions, and determining sample size.		
Core Topics:	Basic concepts and definitions of statistics, formulas, solutions, data types, statistical graphs, measures of central tendency, measures of variation, measures of relative standing, basic probabilities of events, general probability distributions, the binomial distribution, Poisson distribution, uniform distribution, normal distribution, and exponential distribution, central limit theorem, hypothesis testing, population means, sample sizes, hypotheses, critical values and rejection regions, and test statistics.		
Prerequisites:	MGF1106 or any MAC course		
STA 3032	Probability and Statistics for Engineers	GRM	Credit Hours: 3
Description:	Axioms of probability; combinatorial and geometrical probability; probability distributions; measures of location and dispersion; sampling and sampling distributions; estimation and tests of hypotheses; engineering applications.		
Core Topics:	Describe a set of data from an engineering perspective; Understand probability concepts and recognize how they should be applied to solve engineering problems.		
Prerequisites:	MAC 2312		

SOCIAL FOUNDATIONS: GEP 9

ANT 2000	General Anthropology	♦ State Core	Credit Hours: 3
Description:	Designed as a general introduction to the discipline of anthropology. A variety of topics related to anthropology (archaeology, physical biological, cultural and linguistic anthropology) will be covered. Students will be introduced to human physical and cultural diversity that has developed throughout the world, and will learn how and why such variability is important to us as humans.		
Core Topics:	History of evolutionary thought, genetics, primates, hominid evolution, reproduction, culture and survival, food, families, material culture, communication, religion, behavior, human variation, and culture change.		
PSY 2012	General Psychology	♦ State Core	Credit Hours: 3
Description:	Introduction to the wide range of areas within psychology, including experimental, developmental, social and abnormal psychology and personality theory. Students will become aware of the scientific, research-based nature of the field and will be able to critically examine information presented in popular culture. Diversity issues are integrated throughout the materials in an effort to increase awareness and sensitivity to multicultural aspects of psychology.		
Core Topics:	Introduction to psychology, biology of behavior, sensation and perception, consciousness, learning, memory, thought and language, motivation, emotion, infancy and childhood, adolescence and adulthood, intelligence, social influences, social and cultural groups, personality, psychological disorders and treatment.		
SYG 2000	Introduction to Sociology	♦ State Core	Credit Hours: 3
Description:	Introduction to the major concepts, theories, methods, and individuals important to the sociological study of human behavior. A primary goal of the course is to help students develop a sociological perspective for understanding their world. The majority of topics covered in SYG 2000 are the focus of upper division courses offered by faculty in the department.		
Core Topics:	The sociological perspective and research, culture, socialization, social structure, groups and organizations, deviance and crime, global stratification, race, ethnicity, sex, gender, family, intimate relationships, education, religion, politics, healthcare and disabilities, population, collective behavior and social movements.		

SOCIAL FOUNDATIONS: GEP 10

AMH 2020	US History 1877-Present	♦ State Core, GRW & CL	Credit Hours: 3
Description:	Basic level survey course focusing on major developments, important concepts and significant facts in American History from 1877 to present.		
Core Topics:	Victorian Life, Hollywood History, Great Depression, New Deal, WW II, GI Bill, Cold War, McCarthyism, Castro and JFK, LBJ and Civil Rights, Vietnam.		
ECO 2013	Principles of Macroeconomics	♦ State Core	Credit Hours: 3
Description:	An introduction to macroeconomics, including an overview of the market economy, price level/inflation rate determination, stabilization policies, and international economics. Students will develop a basic knowledge of the tools of economic analysis, with specific applications to macroeconomics.		
Core Topics:	Overview of the market economy, supply demand analysis, Gross Domestic Product (GDP) and national income measurement; consumer price index (CPI), inflation, and unemployment rate measurement; gains from trade, international economics and exchange rates; stabilization and government policies- including fiscal (tax and spending) and monetary (Federal Reserve- FED).		

SOCIAL FOUNDATIONS: GEP 10 (continued)

ECO 2023	Principles of Microeconomics	Credit Hours: 3
Description:	An introduction to microeconomics. The determination of prices in a market economy; their role in allocating consumer and producer goods and distributing incomes, including attempts to improve market efficiency through public policy. Students will develop a basic knowledge of the tools of economic analysis, with specific applications to microeconomics.	
Core Topics:	The economizing problem, market capitalism and mixed economies; individual market demand, supply and applications; demand and supply elasticities and applications; consumer behavior and utility maximization; the costs of production, purely competitive firms, monopolies and market structure; government regulation and market failures.	
POS 2041	American National Government	◆ State Core & CL Credit Hours: 3
Description:	This course is designed to familiarize the student with the basic political processes in the United States. We will be exploring the meaning of democracy and the workings of our institutions of government as they were designed and as they exist today.	
Core Topics:	Understanding of the American political system, the difference between fact and opinion, understanding of the competing interests and diversity in American society.	

SCIENCE FOUNDATIONS: GEP 11

AST 2002	Astronomy	◆ State Core Credit Hours: 3
Description:	An introduction of our solar system, stars, and stellar evolution, neutron stars, black holes and galaxies.	
Core Topics:	History of science, solar system, how stars work, survey of the universe.	
Prerequisites:	High school algebra or MAC 1105C.	
CHM 1020	Concepts in Chemistry	◆ State Core Credit Hours: 3
Description:	Concepts will be examined to provide insight into the significant role that chemistry plays in our culture.	
Core Topics:	Types of matter and the elements, the atom and subatomic particles, bonding between atoms and ions, molecular structure, the role of energy in changing matter, types of chemical reactions, calculations for chemical formulas and chemical equations, overview of organic and biochemistry.	
Prerequisites:	High school algebra	
CHM 1032	General Chemistry	Credit Hours: 3
Description:	Introductory study of the fundamental concepts of chemistry. Oriented toward College of Health and Public Affairs majors and required for Nursing majors.	
Core Topics:	Types of matter and the elements, bonding, chemical compound naming, chemical reactions including acid-base and oxidation-reduction, the role of energy in changing matter, calculations for chemical formulas and chemical equations, modern Atomic Theory, molecular structure properties of gases, liquids, and solutions.	
Prerequisites:	MAC 1105C	

SCIENCE FOUNDATIONS: GEP 11 (continued)

CHM 2040	Chemistry Fundamentals IA	Credit Hours: 3
Description:	Principles of modern chemistry, units and measures, basic physical theory of chemical reactivity, stoichiometry, reactions in aqueous solutions, thermochemistry. This course is to be followed by CHM 2041: Chemistry Fundamentals IB. Not open to students with credit in CHM 2045C.	
Prerequisites:	MAC 1105C recommended.	
NOTE:	If you did not take the Chemistry Placement exam or did not place into CHM 2045C, you will be required to take the CHM 2040 and CHM 2041 sequence. To meet the GEP requirement, students must complete both CHM 2040 & CHM 2041.	
CHM 2041	Chemistry Fundamentals IB	Credit Hours: 3
Description:	The second semester of CHM 2040C. Atomic structure, periodicity, chemical bonding, states of matter, gases. Not open to students with credit in CHM 2045C.	
Prerequisites:	CHM 2040	
CHM 2045C	Chemistry Fundamentals I	Credit Hours: 4
	♦ State Core	
Description:	Principles of modern chemistry, units and measures, basic physical theory of chemical reactivity, stoichiometry, reactions in aqueous solutions, thermochemistry, atomic structure, periodicity, chemical bonding, states of matter, gases. Not open to students with credit in both CHM 2040 and CHM 2041.	
Core Topics	Chemical formula, chemical compounds, balancing equations, solubility, chemical reactions, thermodynamics, heat capacity, atomic structure, electron configuration, trends in the periodic table, bonding, gas laws, molecules.	
Prerequisites:	Appropriate score on the UCF Chemistry Placement Exam.	
NOTES:	Students should have good algebra skills and retained knowledge of matter measurement, atoms, and elements from past chemistry courses. If not, take/retake MAC 1105C and/or CHM1032.	
CHS 1440	Principles of Chemistry	Credit Hours: 4
Description:	Basic concepts of chemistry, with emphasis on problem solving and engineering applications. Atomic and molecular structure, states of matter, stoichiometry, equilibrium, electrochemistry and thermodynamics.	
Prerequisites:	One year of high school chemistry or CHM 1032.	
NOTES:	Although not an official prerequisite, you are strongly recommended to have successfully completed MAC 1105 prior to taking this class.	
PHY 1038	Physics of Energy, Climate Change, and Environment	Credit Hours: 3
Description:	Basic principles of physics, under the unifying theme of the production and use of energy and its interaction with the climate system and global environment.	
PHY 2020	Concepts of Physics	Credit Hours: 3
	♦ State Core	
Description:	An introductory course in physics designed for non-science majors, emphasizing topics relevant to everyday life. The course focuses on major physical discoveries and their implications for the world around us.	

SCIENCE FOUNDATIONS: GEP 11 (continued)

PHY 2053C	College Physics I	♦ State Core	Credit Hours: 4
Description:	Introductory physics course for biological science and health majors.		
Core Topics:	Mechanics, waves, thermodynamics		
Prerequisites:	MAC 1105C and MAC 1114C, or equivalent		
PHY 2048C	General Physics Using Calculus I	♦ State Core	Credit Hours: 4
Description:	The course presents a quantitative and qualitative study of physical principles as applied to mechanics and heat. It is a calculus-based course intended for engineering or physics majors.		
Core Topics:	Mechanics, motion in two and three dimensions, Kinetic energy and work, equilibrium and elasticity, and thermodynamics.		
Prerequisites:	MAC 2311C		
PSC 1121	Physical Science		Credit Hours: 3
Description:	Fundamental laws of mechanics, heat, waves, electricity, magnetism, chemical processes and equations, properties of gasses, liquids, solids and solutions.		
Prerequisites:	High school algebra or MAC 1105C.		

SCIENCE FOUNDATIONS: GEP 12

ANT 2511	Human Species		Credit Hours: 3
Description:	General overview of biological or physical anthropology. Will use many lines of evidence to form a holistic picture of human evolution. Students will 1) examine the processes of evolution and other important background concepts, 2) examine our non-human primate relatives to see what they can tell us about ourselves as humans, and 3) study the human fossil and archaeological records, and the spectrum of variation found in modern humanity.		
Core Topics:	History of evolutionary thought, Darwin, Mendel, modern genetics, primate anatomy, non-human primates, primate behavior, paleontology, fossils and dating, hominid adaptation, early hominids, early Homo erectus, Neanderthals, modern humans, human variation and adaptation, and forensic anthropology.		
BSC 1005	Biological Principles	♦ State Core	Credit Hours: 3
Description:	A study of various biological factors which affect the health and survival of man in modern society Designed for non-majors.		
Core Topics:	Principles of cellular life, inheritance, evolution, biodiversity, structure and function and ecology.		
BSC 1050	Biology and Environment		Credit Hours: 3
Description:	Biological implications of the interaction among human society, population and technology in relation to the environment and natural systems. Designed for non-majors.		
Core Topics:	Population growth, climate change, biodiversity, conservation biology, pollution, energy, sustainability, human impacts.		

SCIENCE FOUNDATIONS: GEP 12 (continued)

BSC 2010C	Biology I	♦ State Core	Credit Hours: 4
Description:	Cellular and chemical basis of life, genetics, and the theory of evolution. Emphasis on problem solving, analysis, synthesis of information, and applying data effectively.		
Core Topics:	Basic principles, unifying concepts, and facts of modern biology. Introduction to quantitative biological experimentation.		
Prerequisites:	Open only to students major or minor requires this specific course.		
EVR 1001	Intro to Environmental Science	♦ State Core	Credit Hours: 3
Description:	Environmental science and environmental systems in the context of real places, real people, real problems and real data.		
GEO 1200	Physical Geography		Credit Hours: 3
Description:	Survey of climate, landforms, soils, natural vegetation, minerals.		
Core Topics:	Introduction to Earth, maps, atmosphere, temperature, atmospheric pressure, weather systems, hydrosphere, biochemical cycles, ecosystems, landforms, chemical weathering and mass wasting, and fluvial process.		
GEO 2370	Resources Geography		Credit Hours: 3
Description:	Analysis of basic principles and problems associated with development, use, conservation, and management of natural resources, with special emphasis on the United States.		
GLY 1030	Geology and its Applications		Credit Hours: 3
Description:	Geological principles, applications, and hazards. Students must have excellent critical thinking skills and the ability to visualize. The course involves learning the relationships between concepts instead of memorizing.		
GLY 2038	Environmental Geoscience		Credit Hours: 3
Description:	Environmental issues affecting Earth's crust, including earthquakes, volcanoes, major storms, water-supply problems, resource depletion, waste disposal, land-use planning, flooding, sea-level rise, coastal erosion, and climate change.		
MCB 1310	Introduction to Biotechnology & Genetic Engineering		Credit Hours: 3
Description:	Theories, laws, principles, foundations, scientific methods of genetic engineering & biotechnology and their applications in agriculture, environment and human health. This course introduces a broad range of human knowledge and includes current topics such as gene therapy, molecular cloning, forensics, genetically modified foods and DNA structure. Discussions of legal, moral, ethical and social implications of biotechnology will enable students to understand and actively participate in public debates on enactment of laws and regulations by national and international organizations.		
Core Topics:	The DNA revolution, historical aspects and overview of biotechnology, basic principles of recombinant DNA technology, cloning, forensics and DNA profiling, biotechnology and medicine, biotechnology in agriculture, patent protection and patent law. All scientific aspects will be discussed along with ethical & legal and social implications. The course will include live, in class demonstrations of molecular biology techniques involving DNA.		
MET 2104	The Earth's Climate		Credit Hours: 3
Description:	History, physics and dynamics of the Earth's climate.		

RATES OF UNSUCCESSFULNESS

Course Name	Fall 2015			Fall 2016			Fall 2017		
	DFW%	NC%	Avg. GPA	DFW%	NC%	Avg. GPA	DFW%	NC%	Avg. GPA
COMMUNICATIONS FOUNDATIONS- GEP 1-3									
ENC 1101	8.1	0.3	3.25	8.0	0.2	3.25	8.69	0.42	3.26
ENC 1102	11.9	0.1	3.11	13.0	0.1	3.27	12.31		3.23
COM 1000	3.4		3.26	6.0		3.07	5.3		3.30
SPC 1603	7.9		3.57	5.0		3.47	7.37		3.31
SPC 1608	4.9		3.38	8.0		3.34	3.36	4.51	-
HISTORICAL AND CULTURAL FOUNDATIONS- GEP 4-6									
AMH 2010	6.9		3.25	14.0		2.94	11.74		3.17
ANT 2410	<i>*New course to 2018-2019*</i>			-		-	5.43		3.36
ARH 2050	10.7		3.09	15.0		2.89	17.43		2.86
ARH 2051	0.0		3.94	-		-	7.81		2.98
EUH 2000	20.4		2.98	10.0		3.16	13.04		3.07
EUH 2001	9.6		3.00	8.0		2.97	5.5		3.21
FIL 1000	4.6		3.28	9.0		3.48	5.46		3.54
FIL 2030	3.8		3.79	6.0		3.47	4.65		3.59
FIL 3036	<i>*New course to 2016-2017*</i>			7.0		3.32	6.92		3.31
FIL 3037	<i>*New course to 2017-2018*</i>			-		-	-		-
HUM 2020	7.4		3.20	12.0		3.17	10.07		3.08
HUM 2210	12.3		2.84	12.0		2.94	11.33		3.05
HUM 2230	20.7		2.70	12.0		3.22	9.86		3.51
LIT 2110	17.0		2.79	14.0		2.90	16.16		2.89
LIT 2120	20.4		2.68	9.0		3.05	17.95		2.97
MUH 2017	8.0		3.12	8.0		3.01	8.28		2.97
MUH 2019	15.2		2.55	-		-	-		-
MUL 2010	10.6		3.30	8.0		3.49	7.86		3.42
MUL 2016	8.8		2.65	11.0		2.82	9.9		3.35
MUL 2720	-		-	14.0		2.73	7.69		3.36
PHI 2010	12.4		3.11	15.0		3.15	10.56		3.14
REL 2300	11.0		3.02	15.0		2.71	15.47		2.86
THE 2000	4.6		3.49	5.0		3.64	6.13		3.42
THE 2020	8.5		3.10	7.0		3.18	3.74		3.09
WOH 2012	10.3		2.85	11.0		2.88	16.41		2.89
WOH 2022	13.2		2.96	5.0		3.13	4		3.19
MATHEMATICAL FOUNDATIONS- GEP 7-8									
CGS 1060	14.9		3.20	12.0		3.33	6.92		3.50
CGS 2100	14.6		2.98	19.0		2.74	11.18		2.84
COP 2500	11.5		2.91	8.0		3.54	10.53		3.56
COP 3502	30.3		2.52	52.0		2.3	55.43		2.12
COT 3100	57.9		1.74	48.0		2.25	23.14		2.58
MAC 1105	7.2	13.3	3.17	14.0	8.5	3.36	11.23	7.09	3.33
MAC 2311	33.0	34.2	2.55	41.0	19.4	2.36	39.69	25.2	2.56
MGF 1106	33.9		2.29	38.0		2.14	50.85		1.83
MGF 1107	33.8		2.01	42.0		2.08	25.07		2.24
STA 2014	7.5	2.4	2.94	14.0	3.5	3.07	12.25	3.7	3.02
STA 2023	39.2		2.25	37.0		2.34	28.01		2.50
STA 3032	-		-	8.0		-	8.06		3.17

RATES OF UNSUCCESSFULNESS

Course Name	Fall 2015			Fall 2016			Fall 2017		
	DFW%	NC%	Avg. GPA	DFW%	NC%	Avg. GPA	DFW%	NC%	Avg. GPA
SOCIAL FOUNDATIONS- GEP 9-10									
AMH 2020	11.7		3.08	10.0		3.05	10.8		3.17
ANT 2000	11.4		3.05	11.0		2.99	8.14		3.16
ECO 2013	29.6		2.31	34.0		2.13	25.31		2.42
ECO 2023	21.5		2.68	31.0		2.44	21.67		2.70
POS 2041	11.6		2.93	14.0		2.83	13.42		2.85
PSY 2012	10.7		3.13	11.0		3.05	13.22		2.92
SYG 2000	7.8		2.93	7.0		3.10	5.28		3.35
SCIENCE FOUNDATION- GEP 11-12									
ANT 2511	6.4		3.01	7.0		3.02	7.98		3.10
AST 2002	20.5		2.61	11.0		2.83	13.72		2.80
BSC 1005	28.0		2.2	25.0		2.21	21.97		2.36
BSC 1050	3.7		3.53	-		-	-		-
BSC 2010	22.3		2.55	24.0		2.58	15.07		2.84
CHM 1020	41.0		2.44	32.0		2.48	25.68		3.13
CHM 1032	10.1	19.0	2.97	13.0	1.5	2.93	11.54	4.95	3.21
CHM 2040	16.5	11.3	2.70	24.0	11.8	2.76	25.63	11.87	2.62
CHM 2041	10.9	20.4	2.71	25.0	16.8	2.51	11.49	6.76	3.00
CHM 2045	6.8	11.3	3.06	29.0	12.4	2.67	25.91	16.33	2.80
CHM 2046	30.7		2.39	20.7		2.92	35.6		2.32
CHS 1440	17.3	4.8	2.56	15.0	6.4	3.16	17.06	9.45	3.20
EVR 1001	-		-	6.0		3.32	9.38		3.27
GEO 1200	9.3		2.7	7.0		3.27	7.14		3.07
GEO 2370	6.8		3.45	0.0		3.56	5.63		3.83
GLY 1030	36.0		2.41	35.0		2.35	25.36		2.68
GLY 2038	<i>*New course to 2017-2018*</i>			19.0		2.59	-		-
MCB 1310	18.3		2.63	19.0		2.80	20.88		2.40
MET 2104	<i>*New course to 2017-2018*</i>			-		-	-		-
PHY 1038	<i>*New course to 2017-2018*</i>			-		-	18		2.81
PHY 2020	18.3		2.84	7.0		3.23	9.18		2.99
PHY 2048	8.8		2.65	14.0		2.65	11.62		2.97
PHY 2053	18.5		2.95	10.0		2.95	7.93		3.17
PSC 1121	11.3		2.62	17.0		2.45	11.93		2.88
ELECTIVES/ INTRODUCTORY COURSES									
ART 2823	9.8		2.87	11.2		2.98	17.65		2.90
EDF 2005	7.5		3.31	1.9		3.51	6.33		3.39
EDF 2085	5.4		3.7	4.7		3.64	4.89		3.57
EGS 1006	4.2		3.73	4.9		3.67	4.87		3.78
EME 2040	6.7		3.49	12.5		3.27	6.19		3.51
FIN 2100	14.4		2.8	13.2		2.8	12.94		2.79
HFT 1000	8.9		3.12	11.7		2.99	8.25		3.10
MHS 2330	1.6		3.83	7.0		3.61	4.37		3.54
PAF 2102	3.6		3.41	7.1		3.23	2.17		3.63
SLS 1501	7.0		3.45	8.2		3.31	6.93		3.42
SLS 2311	8.3		2.97	5.2		3.51	6.7		3.28
SOW 2020	3.8		3.38	5.2		3.71	-		-