

**Degree Description**

This degree is awarded to students who complete 60 hours of credit in college-level courses. The courses are often called "transfer" programs because they provide the two-year foundation for transferring to a four-year college and earning a bachelor's degree.

Requirements for the Associate of Science (A.S.) Degree

1. Credit for at least 60 semester hours of college work, excluding developmental courses and including at least 15 hours of college-level mathematics and/or science courses.
  - a. Fulfillment of the 42-hour core curriculum as part of the 60-hour total.
  - b. At least 25 percent of semester hours must be earned in college-level courses through McLennan.
  - c. Pass a computer literacy exam or take COSC 1301 or BCIS 1305.
2. An overall grade point average of at least 2.0.
3. Successful completion of the college's Developmental Education Plan for the Texas Success Initiative.
4. Payment of all financial obligations to the college.

<a href="#">ENGL 1301 Composition I</a> <i>or</i> <a href="#">ENGL 2311 Technical &amp; Business Writing</a>	3 hours
<a href="#">Speech elective</a>	3 hours
<a href="#">Math elective</a>	3-4 hours
<a href="#">Life &amp; Physical Science elective</a>	8 hours
<a href="#">Language, Philosophy, &amp; Culture elective</a>	3 hours
<a href="#">Creative Arts elective</a>	3 hours
<a href="#">HIST 1301 United States History I</a> <i>and</i> <a href="#">HIST 1302 United States History II</a>	3 hours
<a href="#">GOVT 2305 Federal Government</a> <i>and</i> <a href="#">GOVT 2306 Texas Government</a>	3 hours
<a href="#">Social/Behavioral Science elective</a>	3 hours
<a href="#">Component Area Option elective</a>	4 hours
<a href="#">Math elective</a> <i>or</i> <a href="#">Life &amp; Physical Science elective</a>	15 hours
<a href="#">Elective</a> <sup>1</sup>	3 hours
	<b>60-61 hours</b>

**Total hours: 60-61 hours**

<sup>1</sup> Please see advisor for course suggestions.

## Electives/General Education Courses

### Component Area Option

<a href="#">ANTH 2301 Physical Anthropology</a>	3 hours
<a href="#">ANTH 2346 General Anthropology</a>	3 hours
<a href="#">BCIS 1305 Business Computer Applications</a>	3 hours
<a href="#">BIOL 2420 Microbiology for Non-Science Majors</a>	4 hours
<a href="#">COSC 1301 Introduction to Computing</a>	3 hours
<a href="#">DRAM 2366 Film Appreciation</a>	3 hours
<a href="#">EDUC 1100 Learning Framework</a>	1 hours
<a href="#">EDUC 1300 Learning Framework</a>	3 hours
<a href="#">ENGL 1302 Composition II</a>	3 hours
<a href="#">FREN 2312 Intermediate French II</a>	3 hours
<a href="#">GERM 2312 Intermediate German II</a>	3 hours
<a href="#">GOVT 2304 Introduction to Political Science</a>	3 hours
<a href="#">GOVT 2311 Mexican-American and Latinx Politics</a>	3 hours
<a href="#">HIST 2301 Texas History</a>	3 hours
<a href="#">HIST 2311 Western Civilization I</a>	3 hours
<a href="#">HIST 2312 Western Civilization II</a>	3 hours
<a href="#">HIST 2321 World Civilizations I</a>	3 hours
<a href="#">HIST 2322 World Civilizations II</a>	3 hours
<a href="#">HIST 2327 Mexican-American History I</a>	3 hours
<a href="#">HIST 2328 Mexican-American History II</a>	3 hours
<a href="#">HIST 2381 African-American History I</a>	3 hours
<a href="#">PHED 1164 Introduction to Physical Fitness &amp; Wellness</a>	1 hours
<a href="#">PHYS 2425 University Physics I</a>	4 hours
<a href="#">PHYS 2426 University Physics II</a>	4 hours
<a href="#">PSYC 1100 Learning Framework</a>	1 hours
<a href="#">PSYC 1300 Learning Framework</a>	3 hours
<a href="#">PSYC 2314 Lifespan Growth &amp; Development</a>	3 hours
<a href="#">PSYC 2316 Psychology of Personality</a>	3 hours
<a href="#">PSYC 2319 Social Psychology</a>	3 hours
<a href="#">SGNL 2302 Intermediate ASL II</a>	3 hours
<a href="#">SOCI 2301 Marriage &amp; the Family</a>	3 hours
<a href="#">SOCI 2319 Minorities Studies</a>	3 hours
<a href="#">SOCI 2326 Social Psychology</a>	3 hours
<a href="#">SPAN 2312 Intermediate Spanish II</a>	3 hours
<a href="#">SPCH 2333 Discussion &amp; Small Group Communication</a>	3 hours
<a href="#">TECA 1354 Child Growth and Development</a>	3 hours

### Creative Arts

<a href="#">ARTS 1301 Art Appreciation</a>	3 hours
<a href="#">ARTS 1303 Art History I (Prehistoric to the 14th Century)</a>	3 hours
<a href="#">ARTS 1304 Art History II (14th Century to the Present)</a>	3 hours
<a href="#">DRAM 1310 Theater Appreciation</a>	3 hours
<a href="#">DRAM 2361 History of Theater I</a>	3 hours
<a href="#">DRAM 2362 History of Theater II</a>	3 hours
<a href="#">HUMA 1315 Fine Arts Appreciation</a>	3 hours
<a href="#">MUSI 1306 Music Appreciation</a>	3 hours
<a href="#">MUSI 1307 Music Literature</a>	3 hours
<a href="#">MUSI 1310 American Music</a>	3 hours

### Language, Philosophy, & Culture

<a href="#">ENGL 2321 British Literature</a>	3 hours
<a href="#">ENGL 2322 British Literature I</a>	3 hours
<a href="#">ENGL 2323 British Literature II</a>	3 hours
<a href="#">ENGL 2326 American Literature</a>	3 hours
<a href="#">ENGL 2327 American Literature I</a>	3 hours
<a href="#">ENGL 2328 American Literature II</a>	3 hours
<a href="#">ENGL 2331 World Literature</a>	3 hours
<a href="#">ENGL 2332 World Literature I</a>	3 hours
<a href="#">ENGL 2333 World Literature II</a>	3 hours
<a href="#">ENGL 2341 Forms of Literature</a>	3 hours
<a href="#">FREN 2311 Intermediate French I</a>	3 hours
<a href="#">GERM 2311 Intermediate German I</a>	3 hours
<a href="#">HUMA 1301 Introduction to Humanities I</a>	3 hours
<a href="#">HUMA 1302 Introduction to Humanities II</a>	3 hours
<a href="#">PHIL 1301 Introduction to Philosophy</a>	3 hours
<a href="#">PHIL 1304 Introduction to World Religions</a>	3 hours
<a href="#">PHIL 2306 Introduction to Ethics</a>	3 hours
<a href="#">SPAN 2311 Intermediate Spanish I</a>	3 hours
<a href="#">SGNL 2301 Intermediate ASL I</a>	3 hours

## Life & Physical Science

<a href="#">BIOL 1406 Biology for Science Majors I</a>	4 hours
<a href="#">BIOL 1407 Biology for Science Majors II</a>	4 hours
<a href="#">BIOL 1408 Biology for Non-Science Majors I</a>	4 hours
<a href="#">BIOL 1409 Biology for Non-Science Majors II</a>	4 hours
<a href="#">BIOL 1411 General Botany</a>	4 hours
<a href="#">BIOL 1413 General Zoology</a>	4 hours
<a href="#">BIOL 2401 Anatomy &amp; Physiology I</a>	4 hours
<a href="#">BIOL 2402 Anatomy &amp; Physiology II</a>	4 hours
<a href="#">BIOL 2404 Anatomy &amp; Physiology (specialized)</a>	4 hours
<a href="#">CHEM 1405 Introductory Chemistry I</a>	4 hours
<a href="#">CHEM 1411 General Chemistry I</a>	4 hours
<a href="#">CHEM 1412 General Chemistry II</a>	4 hours
<a href="#">ENVR 1301 Environmental Science I (lecture)</a>	3 hours
<a href="#">ENVR 1101 Environmental Science I (lab)</a>	1 hours
<a href="#">ENVR 1302 Environmental Science II - Lecture</a>	3 hours
<a href="#">ENVR 1102 Environmental Science II (lab)</a>	1 hours
<a href="#">ENVR 1401 Environmental Science I (lecture + lab)</a>	4 hours
<a href="#">ENVR 1402 Environmental Science II</a>	4 hours
<a href="#">GEOL 1301 Earth Sciences I for Non-Science Majors (lecture)</a>	3 hours
<a href="#">GEOL 1101 Earth Sciences I for Non-Science Majors (lab)</a>	1 hours
<a href="#">GEOL 1302 Earth Sciences II for Non-Science Majors (lecture)</a>	3 hours
<a href="#">GEOL 1102 Earth Sciences II for Non-Science Majors (lab)</a>	1 hours
<a href="#">GEOL 1303 Physical Geology (lecture)</a>	3 hours
<a href="#">GEOL 1103 Physical Geology Laboratory</a>	1 hours
<a href="#">GEOL 1304 Historical Geology (lecture)</a>	3 hours
<a href="#">GEOL 1104 Historical Geology Laboratory</a>	1 hours
<a href="#">GEOL 1401 Earth Sciences for Non-Science Majors I (lecture + lab)</a>	4 hours
<a href="#">GEOL 1403 Physical Geology (lecture + lab)</a>	4 hours
<a href="#">GEOL 1404 Historical Geology (lecture + lab)</a>	4 hours
<a href="#">PHYS 1401 College Physics I</a>	4 hours
<a href="#">PHYS 1402 College Physics II</a>	4 hours
<a href="#">PHYS 1403 Stars and Galaxies</a>	4 hours
<a href="#">PHYS 1404 Solar System</a>	4 hours
<a href="#">PHYS 1405 Elementary Physics I</a>	4 hours

## Math

<a href="#">MATH 1314 College Algebra</a>	3 hours
<a href="#">MATH 1316 Plane Trigonometry</a>	3 hours
<a href="#">MATH 1324 Mathematics for Business &amp; Social Sciences</a>	3 hours
<a href="#">MATH 1325 Calculus for Business &amp; Social Sciences</a>	3 hours
<a href="#">MATH 1332 Contemporary Mathematics (Quantitative Reasoning)</a>	3 hours
<a href="#">MATH 1342 Elementary Statistical Methods</a>	3 hours
<a href="#">MATH 2412 Pre-Calculus Mathematics</a>	4 hours
<a href="#">MATH 2413 Calculus I</a>	4 hours
<a href="#">PHIL 2303 Introduction to Formal Logic</a>	3 hours

## Social/Behavioral Science

<a href="#">ANTH 2351 Cultural Anthropology</a>	3 hours
<a href="#">CRIJ 1301 Introduction to Criminal Justice</a>	3 hours
<a href="#">ECON 2301 Principles of Macroeconomics</a>	3 hours
<a href="#">ECON 2302 Principles of Microeconomics</a>	3 hours
<a href="#">ENGR 2308 Engineering Economics</a>	3 hours
<a href="#">PSYC 2301 General Psychology</a>	3 hours
<a href="#">SOCI 1301 Introduction to Sociology</a>	3 hours
<a href="#">SOCI 1306 Social Problems</a>	3 hours
<a href="#">SOCW 2361 Introduction to Social Work</a>	3 hours

## Speech

<a href="#">COMM 1307 Introduction to Mass Communication</a>	3 hours
<a href="#">SPCH 1311 Introduction to Speech Communication</a>	3 hours
<a href="#">SPCH 1315 Public Speaking</a>	3 hours
<a href="#">SPCH 1318 Interpersonal Communication</a>	3 hours
<a href="#">SPCH 1321 Business &amp; Professional Communication</a>	3 hours

# Course Descriptions

## ENGL 1301 Composition I

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis is on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus is on writing the academic essay as a vehicle for learning, communication, and critical analysis. Note: ENGL 1301 is a pre-requisite for all 2000-level literature courses. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

---

## ENGL 2311 Technical & Business Writing

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice of individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

---

## HIST 1301 United States History I

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## HIST 1302 United States History II

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## GOVT 2305 Federal Government

Origin and development of the U.S. Constitution; structure and powers of the national government including the legislative, executive, and judicial branches; federalism; political participation; the national election process; public policy; civil liberties; and civil rights. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## GOVT 2306 Texas Government

Origin and development of the Texas constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## ANTH 2301 Physical Anthropology

The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline. Semester Hours 3 (3 Lec)

---

## ANTH 2346 General Anthropology

The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline. Semester Hours 3 (3 lec)

---

## BCIS 1305 Business Computer Applications

Introduces and develops foundational skills in applying essential and emerging business productivity information technology tools. The focus of this course is on business productivity software applications, including word processing, spreadsheets, databases, presentation graphics, data analytics, and business-oriented utilization of the internet. (BCIS 1305 is included in the Business Field of Study.) Semester Hours 3 (2 lec/2 lab)

---

## BIOL 2420 Microbiology for Non-Science Majors

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Prerequisite: BIOL 1406, 1408, 1409, 2401 or 2404 with a grade of C or better. Semester Hours 4 (3 lec/3 lab)

---

## COSC 1301 Introduction to Computing

Provides an overview of computer systems-hardware, operating systems, the Internet, and application software including word processing, spreadsheets, presentation graphics, and databases. Current topics such as the effect of computers on society, and the history and use of computers in business, educational, and other interdisciplinary settings are also studied. This course is not intended to count toward a student's major field of study in business or computer science. Semester Hours 3 (2 lec/2 lab)

---

## DRAM 2366 Film Appreciation

Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinemas impact on and reflection of society. (Cross - listed as COMM 2366) Semester Hours 3 (3 lec)

---

## EDUC 1100 Learning Framework

A study of the: 1) research and theory in the psychology of learning, cognition, and motivation; 2) factors that impact learning; and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as PSYC 1100.) Semester Hour 1 (1 lec)

---

## EDUC 1300 Learning Framework

A study of the: 1) research and theory in the psychology of learning, cognition, and motivation; 2) factors that impact learning; and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as PSYC 1300.) Prerequisite: Must have passed the reading portion of the TSI or concurrent enrollment in INRW 0402. Semester Hours 3 (3 lec)

---

## ENGL 1302 Composition II

Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis is on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. Prerequisite: ENGL 1301 or its equivalent with a grade of C or better or consent of division chair. Semester Hours 3 (3 lec)

---

## **FREN 2312 Intermediate French II**

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: FREN 2311, four years of high school French, or consent of instructor or division chair. Students with four years of high school French are encouraged to see a French instructor prior to enrolling. Semester Hours 3 (3 lec)

---

## **GERM 2312 Intermediate German II**

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: GERM 2311, four years of high school German, or consent of instructor or division chair. Students with four years of high school German are encouraged to see a German instructor prior to enrolling. Semester Hours 3 (3 lec)

---

## **GOVT 2304 Introduction to Political Science**

Introductory survey of the discipline of political science focusing on the scope, and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **GOVT 2311 Mexican-American and Latinx Politics**

The study of Mexican American and Latinx politics within the American political experience. Topics include historical, cultural, socioeconomic, and constitutional issues that pertain to the study of Mexican Americans and other Latinx populations in the United States. Other topics such as political participation, governmental institutions, electoral politics, political representation, demographic trends, and other contemporary public policy debates will also be addressed. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **HIST 2301 Texas History**

A survey of the political, social, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **HIST 2311 Western Civilization I**

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations. Prerequisite: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **HIST 2312 Western Civilization II**

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism. Prerequisite: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **HIST 2321 World Civilizations I**

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. This course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **HIST 2322 World Civilizations II**

A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. Examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, nation/state formation and industrialization, imperialism, global conflicts and resolutions, and global economic integration. The course emphasizes the development, interaction and impact of global exchange. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **HIST 2327 Mexican-American History I**

A survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx. Periods include early indigenous societies, conflict and conquest, early European colonization and empires, New Spain, early revolutionary period, Mexican independence and nation building, United States expansion to the United States-Mexico War Era. Themes to be addressed are mestizaje and racial formation in the early empire, rise and fall of native and African slavery, relationship to early global economies, development of New Spain's/Mexico's northern frontier, gender and power, missions, resistance and rebellion, emergence of Mexican identities, California mission secularization, Texas independence, United States' wars with Mexico, and the making of borders and borderlands. (May be applied to U.S. History requirement.) Semester Hours 3 (3 lec)

---

## **HIST 2328 Mexican-American History II**

Historical, economic, social, and cultural development of Mexican-Americans/Chicanos/as. A survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicanx. Periods include the United States-Mexico War Era, incorporation of Northern Mexico into the United States, Porfirian Mexico, and the nineteenth century American West, 1910 Mexican Revolution and Progressive Era, the Great Depression and New Deal, World War II and the Cold War, Civil Rights Era, Conservative Ascendancy, the age of NAFTA and turn of the 21st Century developments. Themes to be addressed are the making of borders and borderlands, impact of Treaty of Guadalupe Hidalgo, gender and power, migration and national identities, citizenship and expulsion, nineteenth century activism and displacement, industrialization and the making of a transnational Mexican working class, urbanization and community formation, emergence of a Mexican American Generation, war and citizenship, organized advocacy and activism, Chicano Movement, changing identifications and identities, trade and terrorism. (May be applied to U.S. History requirement.) Semester Hours 3 (3 lec)

---

## **HIST 2381 African-American History I**

A survey of the social, political, economic, cultural, and intellectual history of people of African descent in the formation and development of the United States to the Civil War/Reconstruction period. African American History I includes the study of African origins and legacy, transAtlantic slave trade, and the experiences of African Americans during Colonial, Revolutionary, Early National, Antebellum, and the Civil War/Reconstruction Eras. This course will enable students to understand African American history as an integral part of U.S. history. (May be applied to the U.S. History requirement.) Semester Hours 3 (3 lec)

---

## **PHED 1164 Introduction to Physical Fitness & Wellness**

This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training. Semester hours 1 (lab 3)

---

## **PHYS 2425 University Physics I**

Fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem solving. Basic laboratory experiments supporting theoretical principles involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Prerequisite: MATH 2413 with a grade of C or better. Semester Hours 4 (3 lec/3 lab)

---

## **PHYS 2426 University Physics II**

Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics. Laboratory experiments supporting theoretical principles involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports. Prerequisites: PHYS 2425 and MATH 2414 with a grade of C or better. Semester Hours 4 (3 lec/3 lab)

---

## **PSYC 1100 Learning Framework**

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. (Cross-listed as EDUC 1100.) Semester Hour 1 (1 lec)

---

## **PSYC 1300 Learning Framework**

A study of the 1) research and theory in the psychology of learning, cognition, and motivation; 2) factors that impact learning; and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. Prerequisites: Must have passed the reading portion of the TSI Assessment or concurrent enrollment in INRW 0402. Semester Hours 3 (3 lec)

---

## **PSYC 2314 Lifespan Growth & Development**

Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Prerequisite: PSYC 2301 or consent of instructor. Semester Hours 3 (3 lec)

---

## **PSYC 2316 Psychology of Personality**

Study of the various approaches to determinants, development, and assessment of personality. Prerequisite: PSYC 2301. Semester Hours 3 (3 lec)

---

## **PSYC 2319 Social Psychology**

Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. Cross-listed as SOCI 2326. NOTE: Credit will not be given for both PSYC 2319 and SOCI 2326. Prerequisite: PSYC 2301 or SOCI 1301. Semester Hours 3 (3 lec)

---

## **SGNL 2302 Intermediate ASL II**

Review and application of conversational skills in American Sign Language and interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore. Prerequisite: SGNL 2301 with a grade of C or better or consent of the program director. Semester Hours 3 (3 lec)

---

## **SOCI 2301 Marriage & the Family**

Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society. Semester Hours 3 (3 lec)

---

## **SOCI 2319 Minorities Studies**

This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion. Prerequisite: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

## **SOCI 2326 Social Psychology**

Study of individual behavior within the social environment. May include topics such as the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. Cross-listed as PSYC 2319. NOTE: Credit will not be given for both PSYC 2319 and SOCI 2326. Prerequisite: PSYC 2301 or SOCI 1301. Semester Hours 3 (3 lec)

---

## **SPAN 2312 Intermediate Spanish II**

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis is on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2311, four years of high school Spanish, or consent of instructor or division chair. Students with four years of high school Spanish are encouraged to see a Spanish instructor prior to enrolling. Semester Hours 3 (3 lec)

---

## **SPCH 2333 Discussion & Small Group Communication**

Discussion and small group theories and techniques as they relate to group process and interaction. Semester Hours 3 (3 lec)

---

## **TECA 1354 Child Growth and Development**

A study of the physical, emotional, social, and cognitive factors impacting growth and development from conception to adolescence. This course is parallel to the Workforce Education Course Manual (WECM) course CDEC 1354. Semester Hours 3 (3 lec)

---

## **ARTS 1301 Art Appreciation**

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts. Semester Hours 3 (3 lec)

---

## **ARTS 1303 Art History I (Prehistoric to the 14th Century)**

A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Semester Hours 3 (3 lec)

---

## **ARTS 1304 Art History II (14th Century to the Present)**

A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Semester Hours 3 (3 lec)

---

## **DRAM 1310 Theater Appreciation**

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in major productions may be required. Applies as a required Humanities or Visual & Performing Arts course for all students. Semester Hours 3 (3 lec)

---

## **DRAM 2361 History of Theater I**

Study of the history of the theater from primitive times through the Renaissance. Required of theatre majors; open to non-theatre majors. Semester Hours 3 (3 lec)

---

## **DRAM 2362 History of Theater II**

Study of the history of the theater from the Renaissance through today. Required of theatre majors; open to non-theatre majors. Semester Hours 3 (3 lec)

---

## **HUMA 1315 Fine Arts Appreciation**

This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, architecture, drama, and dance) and the ways in which they express the values of cultures and human experience. Semester Hours 3 (3 lec)

---

## **MUSI 1306 Music Appreciation**

Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. (Does not apply to a music major degree.) Applies as a required humanities or fine arts course for all students. Semester Hours 3 (3 lec)

---

## **MUSI 1307 Music Literature**

A survey of the styles and forms of music as it developed from the middle ages to the present. This course will familiarize the student with cultural context, terminology, genres, and notation. Semester hours: 3

---

## **MUSI 1310 American Music**

A general survey of various styles of music of the Americas, including but not limited to jazz, folk, rock, and contemporary music. Satisfies general humanities elective requirements. Semester Hours 3 (3 lec)

---

## **ENGL 2321 British Literature**

A survey of the development of British literature from the Anglo-Saxon period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2322 British Literature I**

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2323 British Literature II**

A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2326 American Literature**

A survey of American literature from the period of exploration and settlement to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2327 American Literature I**

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2328 American Literature II**

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2331 World Literature**

A survey of world literature from the ancient world to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2332 World Literature I**

A survey of world literature from the ancient world through the 16th century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2333 World Literature II**

A survey of world literature from the 17th century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **ENGL 2341 Forms of Literature**

The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

---

## **FREN 2311 Intermediate French I**

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: FREN 1412, three years of high school French, or consent of instructor or division chair. Students with three years of high school French are encouraged to see a French instructor prior to enrolling. Semester Hours 3 (3 lec)

---

## **GERM 2311 Intermediate German I**

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: GERM 1412, three years of high school German, or consent of instructor or division chair. Students with three years of high school German are encouraged to see a German instructor prior to enrolling. Semester Hours 3 (3 lec)

---

## **HUMA 1301 Introduction to Humanities I**

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Team taught by faculty from diverse departments as a colloquium (academic seminar led by a different lecturer and on a different topic at each session). Works may include studies, journals, novels, poems, treatises, graphic novels, films, plays, paintings, musical compositions, etc. Semester Hours 3 (3 lec)

---

## **HUMA 1302 Introduction to Humanities II**

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Team taught by faculty from diverse departments as a colloquium (academic seminar led by a different lecturer and on a different topic at each session). Works may include studies, journals, novels, poems, treatises, graphic novel films, plays, paintings, musical compositions, etc. Semester Hours 3 (3 lec)

---

## **PHIL 1301 Introduction to Philosophy**

A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. Semester Hours 3 (3 lec)

---

## **PHIL 1304 Introduction to World Religions**

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Semester hours 3

---

## **PHIL 2306 Introduction to Ethics**

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Semester Hours 3 (3 lec)

---

## **SPAN 2311 Intermediate Spanish I**

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis is on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412, three years of high school Spanish, or consent of instructor or division chair. Students with three years of high school Spanish are encouraged to see a Spanish instructor prior to enrolling. Semester Hours 3 (3 lec)

---

## **SGNL 2301 Intermediate ASL I**

Review and application of conversational skills in American Sign Language and interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore. Prerequisite: SGNL 1402 with a grade of C or better or consent of the program director. Semester Hours 3 (3 lec)

---

## **BIOL 1406 Biology for Science Majors I**

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. NOTE: Must have passed the reading and writing portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 4 (3 lec/3 lab)

---

## **BIOL 1407 Biology for Science Majors II**

The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Prerequisite: BIOL 1406 with a minimum grade of C. Semester Hours 4 (3 lec/3 lab)

---

## **BIOL 1408 Biology for Non-Science Majors I**

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Semester Hours 4 (3 lec/3 lab)

---

## **BIOL 1409 Biology for Non-Science Majors II**

This course will provide and reinforce a survey and of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Semester hours 4 (3 lec/3 lab)

---

## **BIOL 1411 General Botany**

Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. Includes the role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. This course is intended for science majors. Semester Hours 4 (3 lec/3 lab)

---

## **BIOL 1413 General Zoology**

Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. This course is intended for science majors. Semester Hours 4 (3 lec/3 lab)

---

## **BIOL 2401 Anatomy & Physiology I**

Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, and nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. NOTE: Must have passed the reading and writing portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 4 (3 lec/3 lab)

---

## **BIOL 2402 Anatomy & Physiology II**

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Prerequisite: BIOL 2401 with a grade of C or better. Semester Hours 4(3 lec/3 lab)

---

## **BIOL 2404 Anatomy & Physiology (specialized)**

Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. Semester Hours 4 (3 lec/3 lab)

---

## **CHEM 1405 Introductory Chemistry I**

Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for allied health students and for students who are not science majors. Semester Hours 4 (3 lec/3 lab)

---

## **CHEM 1411 General Chemistry I**

Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Includes basic laboratory experiments supporting theoretical principles presented in CHEM 1411, as well as an introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. Prerequisite: MATH 1314 with a minimum grade of C, passing score on non-credit equivalency exam for MATH 1314, or consent of division chair. High school chemistry is strongly recommended. Semester Hours 4 (3 lec/3 lab)

---

## **CHEM 1412 General Chemistry II**

Chemical equilibrium, phase diagrams and spectrometry, acid-base concepts, thermodynamics, kinetics, electrochemistry, nuclear chemistry, an introduction to organic chemistry and descriptive inorganic chemistry. Includes basic laboratory experiments supporting theoretical principles presented in CHEM 1412, as well as an introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports. Prerequisite: CHEM 1411 with a grade of C or better. Semester Hours 4 (3 lec/4 lab)

---



### **ENVR 1301 Environmental Science I (lecture)**

A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Semester Hours 3 (3 lec)

---

### **ENVR 1101 Environmental Science I (lab)**

This laboratory-based course accompanies ENVR 1301 Environmental Science (lecture). Activities will cover methods used to collect and analyze environmental data. Prerequisite: Credit for or concurrent enrollment in ENVR 1301. Semester Hour 1 (3 lab)

---

### **ENVR 1302 Environmental Science II - Lecture**

General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. Semester Hours 3 (3 lec)

---

### **ENVR 1102 Environmental Science II (lab)**

General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. Lab exercises relate scientific knowledge to problems involving energy and the environment. Includes research projects related to the historical development of current environmental practices and concerns. May include other research projects dealing with current or potential environmental concerns. Prerequisite: Credit for or concurrent enrollment in ENVR 1302. Semester Hour 1 (3 lab)

---

### **ENVR 1401 Environmental Science I (lecture + lab)**

A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. The laboratory activities will cover methods used to collect and analyze environmental data. Semester Hours 4 (3 lec/3 lab)

---

### **ENVR 1402 Environmental Science II**

General interest course requiring a minimum of previous science background and relating scientific knowledge to problems involving energy and the environment. Lab exercises relate scientific knowledge to problems involving energy and the environment. Includes research projects related to the historical development of current environmental practices and concerns. May include other research projects dealing with current or potential environmental concerns. Semester Hours 4 (3 lec/3 lab)

---

### **GEOL 1301 Earth Sciences I for Non-Science Majors (lecture)**

Survey of geology, meteorology, oceanography and astronomy. Semester Hours 3 (3 lec)

---

### **GEOL 1101 Earth Sciences I for Non-Science Majors (lab)**

This laboratory-based course accompanies GEOL 1301 Earth Sciences I. Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography and astronomy. Prerequisite: GEOL 1301. Semester Hours 1 (3 lab)

---

### **GEOL 1302 Earth Sciences II for Non-Science Majors (lecture)**

Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability. Prerequisite: GEOL 1401, 1403 or 1404. Semester Hours 3 (3 lec)

---

### **GEOL 1102 Earth Sciences II for Non-Science Majors (lab)**

This laboratory-based course accompanies GEOL 1302 Earth Sciences II. Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability. Prerequisite: Credit for or concurrent enrollment in GEOL 1302. Semester Hour 1 (3 lab)

---

### **GEOL 1303 Physical Geology (lecture)**

Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Semester Hours 3 (3 lec)

---

### **GEOL 1103 Physical Geology Laboratory**

This laboratory-based course accompanies GEOL 1303 Physical Geology. Laboratory activities will cover methods used to collect and analyze earth science data. Prerequisite: GEOL 1303 or concurrent enrollment. Semester Hour 1 (3 lab)

---

### **GEOL 1304 Historical Geology (lecture)**

A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Prerequisites: GEOL 1303 or 1403. Semester Hours 3 (3 lec)

---

### **GEOL 1104 Historical Geology Laboratory**

This laboratory-based course accompanies GEOL 1304 Historical Geology. Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of earth from rocks and fossils. Prerequisite: GEOL 1304. Semester Hour 1 (3 lab)

---

### **GEOL 1401 Earth Sciences for Non-Science Majors I (lecture + lab)**

Survey of geology, meteorology, oceanography, and astronomy. The lab activities will cover methods used to collect and analyze data in geology, meteorology, oceanography and astronomy. Semester Hours 4 (3 lec/3 lab)

---

### **GEOL 1403 Physical Geology (lecture + lab)**

Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Laboratory activities will cover methods used to collect and analyze earth science data. Semester Hours 4 (3 lec/3 lab)

---

### **GEOL 1404 Historical Geology (lecture + lab)**

A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of earth from rocks and fossils. Prerequisite: GEOL 1303 or 1403. Semester Hours 4 (3 lec/3 lab)

---

### **PHYS 1401 College Physics I**

Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Prerequisite: MATH 1314 and MATH 1316, 2412 or 2413 with a grade of C or better. Semester Hours 4 (3 lec/3 lab)

---

## **PHYS 1402 College Physics II**

Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Prerequisite: PHYS 1401. Semester Hours 4 (3 lec/3 lab)

---

## **PHYS 1403 Stars and Galaxies**

Study of stars, galaxies, and the universe outside our solar system. Semester Hours 4 (3 lec/3 lab)

---

## **PHYS 1404 Solar System**

Study of the sun and its solar system, including its origin. Semester Hours 4 (3 lec/3 lab)

---

## **PHYS 1405 Elementary Physics I**

Conceptual level survey of topics in physics intended for liberal arts and other non-science majors. Semester Hours 4 (3 lec/3 lab)

---

## **MATH 1314 College Algebra**

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Prerequisite: TSI math complete or MATH 0311. Semester Hours 3 (3 lec)

---

## **MATH 1316 Plane Trigonometry**

In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Graphing calculator required. Prerequisite: MATH 1314 with a minimum grade of C, or passing score on non-credit equivalency exam for MATH 1314, or consent of division chair. Semester Hours 3 (3 lec)

---

## **MATH 1324 Mathematics for Business & Social Sciences**

The application of common algebraic functions, including polynomial, exponential, logarithmic and rational, to problems in business, economics and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices, linear programming; and probability, including expected value. Prerequisite: TSI math complete or MATH 0311. Semester Hours 3 (3 lec)

---

## **MATH 1325 Calculus for Business & Social Sciences**

This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics and social sciences. This course is not a substitute for MATH 2313 or 2413 - Calculus I. Prerequisite: MATH 1314 or MATH 1324, minimum grade C. Semester Hours 3 (3 lec)

---

## **MATH 1332 Contemporary Mathematics (Quantitative Reasoning)**

Intended for Non-STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Graphing calculator required. Prerequisite: TSI math complete or MATH 0308. Semester Hours 3 (3 lec)

---

## **MATH 1342 Elementary Statistical Methods**

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Graphing calculator required. Prerequisite: TSI math complete or MATH 0308 or completion of college-level math course. Semester Hours 3 (3 lec)

---

## **MATH 2412 Pre-Calculus Mathematics**

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Prerequisite: MATH 1314 with a minimum grade of C, or passing score on non-credit equivalency exam for MATH 1314, or consent of division chair. Semester Hours 4 (4 lec)

---

## **MATH 2413 Calculus I**

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas. Graphing calculator required. Prerequisite: MATH 2412 with a minimum grade of C, or both MATH 1314 and MATH 1316 with minimum grades of C, or passing score on non-credit equivalency exam for MATH 2412, or consent of division chair. Semester Hours 4 (4 lec)

---

## **PHIL 2303 Introduction to Formal Logic**

The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules. Semester Hours 3 (3 lec)

---

## **ANTH 2351 Cultural Anthropology**

The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline. Prerequisite: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 Lec)

---

## **CRIJ 1301 Introduction to Criminal Justice**

This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes, and an overview of the criminal justice system, including law enforcement and court procedures. Semester Hours 3 (3 lec)

---

## **ECON 2301 Principles of Macroeconomics**

Analyzes the economy as a whole including measurement and determination of aggregate demand and aggregate supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, fiscal policy and monetary policy. Prerequisite: Must have passed the TSI Assessment or be concurrently enrolled in INRW 0402. Semester Hours 3 (3 lec)

---

## **ECON 2302 Principles of Microeconomics**

Analyzes the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisite: Must have passed the TSI Assessment or be concurrently enrolled in INRW 0402. Semester Hours 3 (3 lec)

---

## **ENGR 2308 Engineering Economics**

Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam. Prerequisite: MATH 2413 with a grade of C or better. Semester Hours 3 (3 lec)

---

**PSYC 2301 General Psychology**

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

---

**SOCI 1301 Introduction to Sociology**

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Semester Hours 3 (3 lec)

---

**SOCI 1306 Social Problems**

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Semester Hours 3 (3 lec)

---

**SOCW 2361 Introduction to Social Work**

An overview of the history and development of social work as a profession. The course is designed to foster a philosophical, historical, and critical understanding of the social work profession, including social work values, ethics, and areas of practice utilized under a Generalist Intervention Model. Prerequisite: TSI complete in Writing or have credit for INRW 0402 Semester Hours 3 (3 lec)

---

**COMM 1307 Introduction to Mass Communication**

Survey of basic content and structural elements of mass media and their functions and influences on society. Semester Hours 3 (3 lec)

---

**SPCH 1311 Introduction to Speech Communication**

Introduces basic human communication principles and theories embedded in a variety of contexts, including interpersonal, small group, and public speaking. Semester Hours 3 (3 lec)

---

**SPCH 1315 Public Speaking**

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Semester Hours 3 (3 lec)

---

**SPCH 1318 Interpersonal Communication**

Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts, including friendships, romantic partners, families, and relationships with co-workers and supervisors. Semester Hours 3 (3 lec)

---

**SPCH 1321 Business & Professional Communication**

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Semester Hours 3 (3 lec)

---