

**LANDER UNIVERSITY**  
**BRIDGE PROGRAM- COURSES TO CONSIDER**

**ART 101.INTRODUCTION TO ART**

A study of the basic visual vocabulary of art; line, tone, color, shape, and texture, etc. A study of the development by artists in various periods and cultures from prehistoric to contemporary times. (General Education – Humanities and Fine Arts) *Three credit hours.*

**BIOL 101.GENERAL BIOLOGY**

This laboratory science course provides non-majors with an introduction to the foundational themes of biology. Topics include scientific inquiry, cellular processes, reproduction, genetics, evolution, ecology, and conservation biology. This course cannot be used to satisfy the requirements for the biology major or biology minor. Three hours lecture, three hours laboratory weekly. (General Education – Scientific and Mathematical Reasoning) *Four credit hours.*

**BIOL 102.ORGANISMAL BIOLOGY**

This laboratory science course provides non-majors with a survey of biological diversity. Students will examine the major groups of prokaryotes, protists, plants, fungi, and animals in both classroom and field settings. Form and function, ecology, and evolutionary relationships are emphasized. This course cannot be used to satisfy the requirements for the biology major or biology minor. Three hours lecture, three hours laboratory weekly. (General Education – Scientific and Mathematical Reasoning) *Four credit hours.*

**CHEM 111-112.GENERAL CHEMISTRY**

A systematic treatment of chemical principles. Topics include atomic structure, chemical bonding, states of matter, thermodynamics, equilibrium principles, kinetics, acid-base theory, electrochemistry, coordination compounds, and radiochemistry. Three hours lecture, three hours laboratory weekly. CHEM 111 is a prerequisite for CHEM 112. (General Education – Scientific and Mathematical Reasoning) *Four credit hours per course.*

**CIS 102.APPLICATION SOFTWARE**

Designed to enable students to improve their personal productivity as knowledge workers. Topics include advanced software functionality, organization and management of data, webpage design and publishing, effective presentation design and delivery. Course environment will include both lectures and laboratory experience. *Three credit hours.*

**ENGL 101.WRITING AND INQUIRY I**

Students write for a variety of situations, audiences and purposes with an emphasis on the relationship between writing and thinking. (General Education – Core Academic Skills) *Three credit hours.*

**ENGL 102.WRITING AND INQUIRY II**

Students write in response to diverse texts, refining their abilities to analyze, interpret, synthesize, and evaluate ideas with an emphasis on research, and MLA style documentation. Prerequisite: ENGL 101 or placement in ENGL 102. (General Education – Core Academic Skills) *Three credit hours.*

**FINA 151.FINANCIAL WELLNESS**

To inform students how individual choices influence future earnings potential and wealth building goals. Students will learn how they can meet their long-term life goals through personal and financial management. Topics include money management, spending and credit, savings strategies and investing. *Three credit hours.*

**FR 101.FRENCH FOR GLOBAL CITIZENS I**

Students learn basic sentence structure and vocabulary in French and are introduced to the cultures of the French-speaking world, with an emphasis on France. Students also begin to acquire the language skills and cultural knowledge to participate effectively in multilingual communities at home and around the world. Prerequisite: Placement determined per Foreign Language Placement Policy. (General Education - Core Academic Skills and General Education Electives) *Three credit hours.*

**FR 102.FRENCH FOR GLOBAL CITIZENS II**

This course is designed for students who have taken FR 101 or its equivalent, and builds upon what they have already studied. Students learn basic sentence structures and vocabulary in French and are introduced to the cultures of the French-speaking world, with an emphasis on France. Students continue to acquire the language skills and cultural knowledge to participate effectively in multilingual communities at home and around the world. Prerequisite: FR 101 or placement determined per Foreign Language Placement Policy. (General Education - Core Academic Skills and General Education Electives) *Three credit hours*

**HIST 101, 102.WESTERN CIVILIZATION**

The historical development of Western institutions, ideas, and cultures from the beginning of civilization to 1918. The first semester covers the period before 1600, the second from 1600 to 1918. Neither course is a prerequisite for the other. (General Education – Behavioral and Social Perspectives) *Three credit hours per course.*

**MATH 123.CALCULUS AND ITS APPLICATIONS**

An intuitive presentation of the concepts of calculus interwoven with numerous real-world applications of mathematical models. Topics include: algebraic, exponential, and logarithmic functions, limits, continuity, derivatives, and integrals. Applications in the Physical, Life and Social Sciences, Business, and Medicine. (Not intended for Mathematics majors. May not be taken by students who have successfully

completed MATH 141.) Competence in college level algebra is necessary for successful completion of the course. (MATH 121 or MATH 114 is suggested for those without adequate mathematical background.) (General Education – Scientific and Mathematical Reasoning and Core Academic Skills) *Three credit hours.*

#### **MATH 141.SINGLE VARIABLE CALCULUS I**

Limits, continuity, the derivative, the chain rule, implicit differentiation, applications of the derivative, and the Mean Value Theorem. Definite and indefinite integration, the Fundamental Theorem of Calculus, and an introduction to integration through u-substitution. Students must have a thorough knowledge of precalculus such as is covered in MATH 114, including proficiency with algebra and the trigonometric functions. Students without such a background are strongly advised to take MATH 114. (General Education – Scientific and Mathematical Reasoning and Core Academic Skills) *Four credit hours.*

#### **MATH 142.SINGLE VARIABLE CALCULUS II**

This course covers techniques of integration, improper integrals, applications of the integral, infinite sequences and series, power series, Taylor's Theorem, and parametric and polar curves. Prerequisite: "C" or better in MATH 141. (General Education – Scientific and Mathematical Reasoning) *Four credit hours*

#### **MATH 211.INTRODUCTION TO STATISTICAL METHODS I**

An introduction to elementary data analysis, descriptive measures, theoretical distributions of random variables, and sampling distributions of statistics leading to statistical inference including estimation of parameters with confidence intervals and tests of hypotheses. (MATH 311 is recommended for mathematics majors and is required for dual-degree engineering students.) (General Education – Scientific and Mathematical Reasoning and Core Academic Skills) *Three credit hours.*

#### **MUSI 101.INTRODUCTION TO MUSIC**

An introductory course in listening, with accompanying discussion of the historical-cultural aspects of the art of music. This course is intended for non-music majors. General Education – Humanities and Fine Arts) *Three credit hours*

#### **PSYC 101.GENERAL PSYCHOLOGY**

This course introduces students to the fundamental laws, facts, problems, and fields of psychology and its relation and important applications to other fields. Prohibited to students currently enrolled in or having earned credit in PSYC 102. (General Education – Behavioral and Social Perspectives). *Three credit hours.*

#### **SOCI 101.INTRODUCTION TO SOCIOLOGY**

General perspectives of sociologists toward human behavior in social groups, the individual as a social actor, interaction pattern between social groups, inter-institutional differentials in human behavior, and dynamics of social systems. SOCI 101 is required of all sociology majors. (General Education – Behavioral and Social Perspectives) *Three credit hours.*

#### **SPAN 101.SPANISH FOR GLOBAL CITIZENS I**

Students learn basic sentence structure and vocabulary in Spanish and are introduced to the cultures of the Spanish-speaking world. Students also begin to acquire the language skills and cultural knowledge to participate effectively in multilingual communities at home and around the world. Prerequisite: Placement determined per Foreign Language Placement Policy. (General Education - Core Academic Skills and General Education Electives). *Three credit hours.*

#### **SPAN 102.SPANISH FOR GLOBAL CITIZENS II**

This course is designed for students who have taken SPAN 101 or its equivalent, and builds upon what they have already studied. Students learn basic sentence structures and vocabulary in Spanish and are introduced to the cultures of the Spanish-speaking world. Students continue to acquire the language skills and cultural knowledge to participate effectively in multilingual communities at home and around the world. Prerequisite: SPAN 101 or placement determined per Foreign Language Placement Policy. (General Education - Core Academic Skills and General Education Elective). *Three credit hours*

#### **THTR 201.THEATRE APPRECIATION**

A study in theatrical literature that focuses on key historical eras in the development of theatre movements. (General Education – Humanities and Fine Arts) *Three credit hours.*