



# **GENERAL CATALOG**

## **2023-2024**

Mount Tamalpais College  
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## COURSES

### Course Numbers and Titles

<b>CN</b>	<b>Title</b>	<b>Units</b>
ANT 220	Cultural Anthropology (SOC)	3
ART 117	Introduction to Dramatic Arts (ART)	3
ART 118	Theater Improvisation (ART)	3
ART 210	History of Photography (ART)	3
ART 211	Art History & Appreciation (ART)	3
ART 220	Introduction to Film (ART)	3
AST 217	Astronomy (Non-lab SCI)	3
BIO 141	Anatomy and Physiology with Lab (SCI)	4
BIO 151	Biology I (Non-Lab SCI)	3
BIO 152	Introductory Biology with Lab (SCI)	4
BIO 153	Anatomy and Physiology with Lab (SCI)	4
BIO 206	Introduction to Neuroscience (Non-Lab SCI)	3
BIO 207	Introduction to Neuroscience with Lab (SCI)	4
BUS 101	Introduction to Business (ELECT)	3
BUS 220	Microeconomics (ELECT)	3
BUS 221	Macroeconomics (ELECT)	3
CHM 111	Introductory Chemistry with Lab (SCI)	4
COM 110	Introduction to Mass Communication (COMM)	3
COM 146	Public Speaking (COMM)	3
COM 201	Journalism (ELECT)	3
CIS 101	Computer Literacy (ELECT)	3
ENG 98	Strategies for College Reading (Non-credit)	Non-credit
ENG 99A	Developmental English I (Non-credit)	Non-credit
ENG 99B	Developmental English II (Non-credit)	Non-credit
ENG 101A	Reading and Composition (COMP)	3
ENG 101B	Critical Thinking, Reading, and Writing (CRIT THINK)	3
ENG 102	Introduction to Literature (LIT)	3
ENG 110	Introduction to Screenwriting (LIT)	3
ENG 204	Interdisciplinary Reading, Writing and Research (COMP)	3
ENG 210	Creative Writing (ELECT)	3
ENG 211	Creative Writing: The Personal Essay (ELECT)	3
ENG 220	Modern World Literature (LIT)	3
ENG 234	Genres of Short Fiction (LIT)	3
ENG 243	Critical Thinking (CRIT THINK)	3
ENG 248	Modern American Literature (LIT)	3
ENG 249	American Literature: Romanticism to the 20 <sup>th</sup> Century (LIT)	3
ENG 251	Chicano Literature (LIT)	3

ENG 273	Shakespeare (LIT)	3
ENG 284	Multicultural Literature (LIT)	3
EST 204	Environmental Science (Non-lab SCI)	3
GEO 215	Geology (Non-lab SCI)	3
HED 220	Introduction to Public Health (Non-lab SCI)	3
HIS 101	U.S. History I (HIS)	3
HIS 102	U.S. History II (HIS)	3
HIS 103	European History (HIS)	3
HIS 127	Latin American History (HIS)	3
HIS 130	Modern African History (HIS)	3
HIS 131	South African History (HIS)	3
HIS 213	Human Civilization I (HIS)	3
HIS 214	Human Civilization II (HIS)	3
HIS 220	California History (HIS)	3
HIS 224	Asian History (HIS)	3
HIS 225	The American Experience (HIS)	3
HIS 226	Ancient African History (HIS)	3
HIS 227	Ancient World History (HIS)	3
HIS 228	Mexican History (HIS)	3
HIS 229	History of India: 19 <sup>th</sup> & 20 <sup>th</sup> Centuries (HIS)	3
HIS 230	Early Latin American History (HIS)	3
HIS 233	African-American History (HIS)	3
HIS 240	World History (HIS)	3
LA 99	Introduction to College	Non-credit
MTH 50A	Mathematics Foundations I	Non-credit
MTH 50B	Mathematics Foundations II	Non-credit
MTH 99	Elementary Algebra	Non-credit
MTH 110	Business Math (MTH)	3
MTH 115	Intermediate Algebra (MTH)	3
MTH 125	Geometry (MTH)	3
MTH 135	Statistics (MTH)	3
MTH 220	Pre-Calculus I (MTH)	3
MTH 221	Pre-Calculus II (MTH)	3
MTH 226	Pre-Calculus with Analytical Geometry (MTH)	3
MTH 230	Calculus I (MTH)	3
MTH 231	Calculus II (MTH)	3
MTH 232	Calculus III (MTH)	3
MTH 243	Calculus IV (MTH)	3
MTH 252	Discrete Mathematics (MTH)	3
MTH 260	Differential Equations (MTH)	3
MTH 287	Linear Algebra (MTH)	3
MUS 212	Music Appreciation (ART)	3
PHL 270	Social Ethics	3

PHL 271	Introduction to Philosophy (PHIL)	3
PHL 274	Introduction to Eastern Philosophy and Buddhism (PHIL)	3
PHY 154	Introductory Physics with Lab (SCI)	4
POL 241	American Government (AM GOV)	3
PSY 121	Social Psychology (PSY)	3
PSY 122	Psychology of Family (PSY)	3
PSY 211	Abnormal Psychology (PSY)	3
PSY 221	General Psychology (PSY)	3
PSY 255	Child Growth and Development (PSY)	3
REL 280	Religion in America	3
SOC 230	Sociology (SOC)	3
SPA 101	Elementary Spanish I (ELECT)	4-5
SPA 102	Elementary Spanish II (ELECT)	4-5
SPA 211	Intermediate Spanish I (ELECT)	4-5
SPA 212	Intermediate Spanish II (ELECT)	4-5
SPA 221	Introduction to Spanish Literature (ELECT)	3
SSC 180	Special Topic	3
SSC 202	Comparative Religion (REL)	3
SSC 280	Special Topic	3

## Course Descriptions and Course Learning Outcomes

### **ANT 220 Cultural Anthropology (3)**

This course aims to demonstrate how the basic concepts and techniques developed by cultural anthropologists help us to understand diverse societies, including our own. We will consider topics such as language and symbols, kinship, gender, ethnicity, economics, politics, religion, and social change in a broad comparative framework. Major goals are an increased awareness of the social and cultural dimensions of human experience: the diversity and flexibility of human cultures; and processes of intercultural communication and conflict.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Explain how anthropologists study the native point of view (emic) but also construct an analytical view (etic) of other cultures;
2. Understand the nature of culture: that it is adaptive, learned, differentially shared, transmitted through language, a system of interdependent parts, and gives meaning to reality;
3. Critically evaluate their own culture using the tools of cultural relativism and holism and their knowledge of the concept of culture;
4. Understand the broad correlations between a culture's subsistence practices and other aspects of culture, including economic, social, political organization; status and gender relations; level of conflict; and belief systems.

### **ART 117 Introduction to Dramatic Arts (3)**

An introduction to the basics of the craft of acting. The focus of this course is on the aesthetic, communicative, collaborative, and performative elements of the theatrical process.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Effectively communicate using the terminology of acting and the language of theater;
2. Demonstrate the fundamental skills necessary to analyze and perform a scene.

### **ART 118 Introduction to Theater Improvisation (3)**

This class teaches the fundamentals of creative exploration, group collaboration and problem solving in the context of improvisational theater and the creative arts.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Move and perform pantomime theater scenes with confidence
2. Understand the fundamentals of theatrical performance
3. Form a complete story with conflict, resolution and characters

### **ART 210 History of Photography**

This course is an overview of the history of photography from its origins to the present day with an emphasis on major photographers and their work. It focuses on the development and history of photography as an art form and the impact this medium has had on art, culture and society.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate their historical knowledge and critical understanding of the significance of photography;
2. Analyze and think critically about photography;
3. Identify and connect important social and personal themes explored through photography;
4. Discuss and interpret images and other work, both verbally and in writing.

### **ART 211 Art History and Appreciation (3)**

This course provides students with conceptual knowledge and fundamental experience with the elements and principles of design in the visual arts. It also provides a selective overview of the arts from different cultures and periods, and focuses on the vocabulary and various medias of art.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Define art history as a discipline;
2. Observe and analyze the visual elements of works of art and visual culture, incorporating the vocabulary used in arts communities;
3. Compare and contrast a variety of visual expressions;
4. Demonstrate an understanding of the relationship between the art-work and its socio-historical context;
5. Express their own ideas in response to works of art in verbal and written form.

### **ART 220 Introduction to Film (3)**

This course is designed to acquaint students with the history and the theories of film within the larger context of visual culture in the 20<sup>th</sup> century. It introduces students to the study of film not only in terms of its artistic and entertainment purposes, but also in its capacity to shape how a community, a region, a nation or a culture may be visualized, represented, or constructed, and thus to make our social, political, and cultural lives.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Outline the history of cinema and the major technological advancements in film;
2. Differentiate the defining characteristics of common film genres;
3. Analyze films using selected critical methodologies;
4. Discuss changes in the socio-political significance of film throughout history.

### **AST 217 Astronomy (3)**

Astronomy is the study of celestial objects and phenomena. By studying this subject, we learn about our universe; what we know about where we are, how we got here, and where we're going. This course will introduce students to the subject of Astronomy and how we use it to understand the world(s) around us. We will discuss the tools and techniques used in astronomy, the origin and structure of our own solar system, and how stars and galaxies evolve. We will also touch on unsolved problems in astrophysics.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Utilize mathematical reasoning and interpret physical characteristics and data to solve astronomical problems, such as the distance scale of the solar system and the electromagnetic spectrum.
2. Apply the scientific method to form and test hypotheses and understand uncertainty in measurements.

3. Apply scientific concepts and theories to answer questions about the solar system (such as the seasons and the phases of the moon), the formation of galaxies (including dark matter), and the life cycle of stars.
4. Evaluate articles for possible answers to currently unsolved questions in astrophysics.
5. Evaluate the role of social context in shaping astronomy. Look at examples in the lives of notable and diverse figures in astronomy.

### **BIO 141 Anatomy & Physiology with Lab**

This course adopts an integrative approach to human anatomy and physiology. The relations of cells and tissues to organ systems are dealt with in detail. Medical language is introduced and current research and advances are discussed. Laboratory includes histological and gross anatomical studies of mammalian examples compared to human models, and simple physiological experiments. Laboratory participation is a requirement.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Use anatomical terms to describe various parts of the human body;
2. Describe the characteristics of different types of tissues that make up the organ systems;
3. Explain the functions carried out by each body system;
4. Describe how the malfunctions of any single body system can have detrimental effects on the whole body;
5. Discuss some clinical cases associated with body system malfunctioning.

### **BIO 151 Biology I – No Lab (3)**

An introduction to biology that investigates life on earth at the molecular, organismal, and ecosystem scales. This course will explore how molecules (DNA, RNA, and proteins) and many types of cells function as parts of living systems, investigate topics in ecology and evolution, and discuss new biotechnologies.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Articulate how molecules and molecular processes provide mechanisms to store and transmit biological information.
2. Apply a fundamental understanding of genes and gene products to examine how genetic variation can affect individuals and populations and evolve over time.
3. Develop an appreciation of the natural world through direct observation of microscopic samples and local ecosystems.
4. Recognize that life sciences research in the past and present is shaped by and can solidify inequities in the society in which it occurs.

### **BIO 152 Introductory Biology with Lab (4)**

An introduction to biology that investigates life on earth at the molecular, organismal, and ecosystem scales. This course will explore how molecules (DNA, RNA, and proteins) and many types of cells function as parts of living systems, investigate topics in ecology and evolution, and discuss new biotechnologies.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Articulate how molecules and molecular processes provide mechanisms to store and transmit biological information.
2. Apply a fundamental understanding of genes and gene products to examine how genetic variation can affect individuals and populations and evolve over time.
3. Develop an appreciation of the natural world through direct observation of microscopic specimens and local ecosystems.
4. Recognize that life sciences research in the past and present is shaped by and can solidify inequities in the society in which it occurs.
5. Interpret experimental data that forms the foundation of our understanding of the living world.

### **BIO 153 Anatomy & Physiology with Lab (4)**

In this course “form underlying function” is emphasized through an integrative approach to human anatomy and physiology. The relations of cells and tissues to organ systems are dealt with in detail. Medical language is introduced and current research and advances are discussed when applicable. Laboratory includes histological and gross anatomical studies of mammalian examples compared to human models, and simple physiological experiments. Laboratory participation is a requirement.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Use anatomical terms to describe various parts of the human body;
2. Describe the characteristics of different types of tissues that make up the organ systems;
3. Explain the functions carried out by each body system;
4. Describe how the malfunctions of any single body system can have detrimental effects on the whole body;
5. Discuss some clinical cases associated with body system malfunctioning.

### **BIO 206 Introduction to Neuroscience (3)**

This is an introductory level course in neuroscience, with an emphasis on how brain structure and function relate to human behavior. The brain and nervous system mediate many complex behaviors ranging from seeing and hearing, to decision-making, emotional processing,



attention, and learning and memory. We will examine these behaviors from the perspectives of molecular and cellular neuroscience (the underlying biology of brain cells, a.k.a. neurons), systems neuroscience (the study of neural circuits), and cognitive neuroscience (explores brain function as it relates to higher-level cognitive processes).

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Explain the basic structure and elements of the nervous system at the chemical, cellular, and circuit levels.
2. Describe the basic ways the brain processes and stores information and apply this knowledge to everyday phenomena such as perception, learning, etc.
3. Critically evaluate scientific experiments, observations and claims about brain function, mental disease, and drugs that affect behavior.
4. Recognize and analyze ethical issues in neuroscience, including those related to experiments on humans and other animals and to the application of discoveries in neuroscience.

### **BIO 207: Introduction to Neuroscience with Lab (4)**

This is an introductory level course in neuroscience, with an emphasis on how brain structure and function relate to human behavior. The brain and nervous system mediate many complex behaviors ranging from seeing and hearing, to decision-making, emotional processing, attention, and learning and memory. We will examine these behaviors from the perspectives of molecular and cellular neuroscience (the underlying biology of brain cells, a.k.a. neurons), systems neuroscience (the study of neural circuits), and cognitive neuroscience (explores brain function as it relates to higher-level cognitive processes).

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Explain the basic structure and elements of the nervous system at the chemical, cellular, and circuit levels.
2. Describe the basic ways the brain processes and stores information and apply this knowledge to everyday phenomena such as perception, learning, etc.
3. Critically evaluate scientific experiments, observations and claims about brain function, mental disease, and drugs that affect behavior.
4. Recognize and analyze ethical issues in neuroscience, including those related to experiments on humans and other animals and to the application of discoveries in neuroscience.
5. Carefully obtain and record laboratory measurements and observations and carry out qualitative and quantitative analyses of these data.

### **BUS 101 Introduction to Business (3)**

This course is a comprehensive study and analysis of the principles of business. The course introduces students to contemporary business principles, practices, and terminology. Students will gain an understanding and appreciation of the private enterprise system, and how the functional areas of business work and interrelate.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Explain the concepts, principles, and operation of the private enterprise system or capitalism, as an economic system and then compare and contrast it to other economic systems;
2. Compare and analyze the legal forms of business ownership and evaluate their implications in terms of risk and capital formation;
3. Analyze and evaluate concepts and processes involved in business operations, including production, marketing, human resources, finance, and accounting;
4. Evaluate or judge the importance of human, capital, and physical resources in a business and the manager's role in selection, placement, development, and utilization of these resources.

### **BUS 220 Microeconomics (3)**

General introduction to microeconomic systems. An examination of general microeconomics theory with an emphasis on supply and demand, opportunity cost, consumer choice, the firm, market structure(s) and regulation, allocation of resources, capital, interest, profit, labor unions, income analysis, energy, national resource economics, and public policy.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Define microeconomic terms and concepts;
2. Assess the outcomes of supply and demand forces from a microeconomic perspective;
3. Analyze the market outcomes of essential microeconomic indicators;
4. Evaluate consumer behavior in terms of utility maximization.

### **BUS 221 Macroeconomics (3)**

This course is an introduction to economic theory and analysis with emphasis on monetary and fiscal policy. Topics include: gross domestic product, business cycles, inflation, recession, the Keynesian model on unemployment, on money and the Federal Reserve System. In this broad introductory survey, special attention is given to the role of economic principles in analyzing and understanding current economic problems. Emphasis is placed on examining the functioning of the economy and on dealing with such matters as unemployment, inflation and recession.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of basic economic concepts such as: scarcity, resources, production possibilities, circular flow, supply and demand, gross domestic product, unemployment, and inflation;
2. Understand and explain the essential differences that separate and distinguish the Classical and Keynesian Schools in macroeconomics;
3. Understand and explain the concepts, tools, and implementation of fiscal policy;
4. Interpret, evaluate, or assess the health of the current US economy based on current macroeconomic statistics.

**CHM 111 Introductory Chemistry with Lab (4)**

This course is an introduction to inorganic chemistry, including chemical reactions, stoichiometry, thermochemistry, gasses and their behavior and the structure of the atom.

**Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Apply models relating to atomic theory, chemical bonding, solutions and gasses to analyze problems involving chemical systems.
2. Utilize problem solving tools such as mathematical formulas and dimensional analysis to solve chemical problems.
3. Carefully obtain and record laboratory measurements and observations and carry out qualitative and quantitative analyses of these data.
4. Evaluate scholarly work to recognize the role of chemistry in societal issues.

**COM 110 Introduction to Mass Communication (3)**

An overview of the role of print and electronic media in the dissemination of information to a mass audience.

**Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Critically assess the history, structure, and function of dominant mass media forms;
2. Demonstrate oral and written competence of the evolution of mass media as a result of emerging technologies, cultural conditions, and human ingenuity;
3. Trace the influences of mass media forms on major cultural practices and social formations;
4. Identify examples of the ways mass media affect contemporary social, political, and cultural climates.

**COM 146 Public Speaking (3)**

A course designed to help students communicate more effectively through a study of the terms,

concepts and current theories in the field of communication. Several levels of communication are examined: intrapersonal, interpersonal, nonverbal, small group, intercultural and mass media. Through speech and writing assignments, students have an opportunity to develop their verbal and written communication skills.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of the fundamental principles of effective communication;
2. Understand ethical obligations in the communication process;
3. Present organized ideas in a systematic outline form;
4. Design various types of speeches (e.g., to inform, to persuade).
5. Give thoughtful, constructive feedback on peer speeches.

### **COM 201 Journalism (3)**

This course teaches the theory and practice of writing news stories for the media. The student learns effective writing and interviewing strategies, common story structures, grammar and style rules, libel, and privacy laws.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Conduct reporting and prepare it for presentation;
2. Recognize the differences between fact-based and opinion-based media style;
3. Conduct in-depth interviews with sources;
4. Analyze the legal and ethical dilemmas faced by professionals in mass media.

### **CIS 101 Computer Literacy (3)**

Introduction to basic computer theory, basic word processing, spreadsheets, and databases.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Apply basic computer concepts and terms;
2. Understand theory of internet browsers;
3. Create documents, spreadsheets, and databases using desktop software;
4. Integrate data between desktop applications;
5. Demonstrate safe and ethical use of electronic materials.

### **ENG 98 Strategies for College Reading (non-credit)**

This is a non-credit course designed to give students added practice in reading, thinking, and writing in a fun and low pressure environment. Reading ease and comprehension are vital for

college success, and different readers require different strategies. This course offers the chance to read texts similar to those encountered later in college and learn different ways of approaching them and thinking about them. Strategies will be introduced and built upon each week. Topics include pre-reading, active reading, guided annotation, note-taking, using visual structures and graphic organizers, question generation, self-assessment, oral reading, and close reading for analysis.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Read with improved concentration, vocabulary, and comprehension.
2. Reading with purpose and planning their own guided annotation.
3. Extract useful information from the text as they plan for discussion.
4. Refer back to the text during discussions to support the point they are making.

### **ENG 99A Developmental English I (Non credit)**

The purpose of this course is to develop effective study habits as well as critical reading, writing, and thinking skills to use in college and beyond. Texts include literacy narratives, longform journalism, and interdisciplinary texts for students to practice reflecting and analyzing different genres of writing. Writing assignments include short reading responses, free-writes, mechanics and conventions exercises, and two formal essays. Students also reflect on the benefits and drawbacks of the five-paragraph structure.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. By the end of the course, the student will be able to:
2. Demonstrate an introductory understanding of argument and audience in academic essays.
3. Read and understand introductory college texts and generate thoughtful written and verbal responses to them.
4. Be aware of conventions and styles appropriate to different audiences, genres and contexts.
5. Demonstrate an introductory understanding of the use of evidence to support an argument.
6. Be aware of grammar, punctuation, and spelling expected in academic essays.
7. Recognize ways of organizing ideas in a logical, cohesive, and clear manner.
8. Demonstrate an introductory understanding of critical thinking skills through summarizing, paraphrasing, and identifying their assumptions about course reading.

### **ENG 99B Developmental English II (Non credit)**

The purpose of this course is to build critical reading, writing, and thinking skills through discussions and analytical writing assignments. Texts include longform journalism, speeches

and letters, poetry and short fiction, and other interdisciplinary texts. The course helps students develop their thinking and writing process through thesis development and evidence-gathering activities and by drafting through all stages three formal essays with different purposes. The writing assignments in this class require students to move beyond the five-paragraph structure and to develop essay structures that reflect the organization of their argument.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Recognize arguments consistent with assignment and audience in academic essays.
2. Read and understand more challenging introductory college texts and generate thoughtful written and verbal responses to them.
3. Be aware of conventions and styles appropriate to different audiences, genres and contexts.
4. Use evidence to support an argument.
5. Use grammar, punctuation, and spelling expected in academic essays.
6. Organize simple ideas in a logical, cohesive, and clear manner.
7. Paraphrase and respond to other writers' ideas and styles to support an argument.
8. Apply critical thinking skills through practicing summarizing, paraphrasing, and identifying their assumptions about course reading; show an introductory understanding of the practice of noticing different argumentative moves.

### **ENG 101A Reading and Composition (3)**

This course focuses on reading and analyzing a variety of narrative and expository texts including academic essays, fiction and journalism. Students compose a sequence of expository essays. Instruction emphasizes reading and writing, with a focus on thesis formation, sentence and paragraph structure, and essay development.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Articulate a clear argument consistent with the assignment and audience.
2. Read and understand college-level texts and generate thoughtful written and verbal responses to them.
3. Engage with conventions and styles appropriate to different audiences, genres and contexts.
4. Gather, evaluate, and analyze evidence from one or two texts to support an argument.
5. Employ grammar, punctuation, and spelling appropriate to the intended audience to convey meaning clearly.
6. Organize and structure ideas in a logical, cohesive, and clear manner.
7. Paraphrase and respond to other writers' ideas and styles to support their argument.
8. Apply critical thinking tools to identify and evaluate strategies of argument and persuasion.

### **ENG 101B Critical Thinking, Reading, and Writing (3)**

Reading and writing to analyze, evaluate and form rational arguments. This course develops the skills of reasoning, argumentation, drawing conclusions from evidence, and inductive and deductive thinking.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Articulate a clear and complex argument consistent with the assignment and audience.
2. Read and understand more complex college-level texts and generate critical written and verbal responses to them.
3. Engage critically with conventions and styles appropriate to different audiences, genres and contexts.
4. Gather, evaluate, and analyze evidence from multiple texts to support an argument.
5. Employ grammar, punctuation, and spelling appropriate to the intended audience to convey meaning clearly.
6. Organize and structure complex ideas in a logical, cohesive, and clear manner.
7. Analyze other writers' ideas and styles to shape, support, and complicate their argument.
8. Demonstrate strengthened critical thinking skills to identify and evaluate strategies of argument and persuasion..
9. Demonstrate an introductory understanding of annotated bibliographies and literature reviews.

### **ENG 102 Introduction to Literature (3)**

This course provides an introduction to the four major genres of literature: novel, short story, drama, and poetry.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Read and understand literary works of multiple genres and generate thoughtful written and verbal responses to them.
2. Proficiently articulate a complex literary analysis consistent with the assignment and audience.
3. Engage with a variety of genres, and critically analyze works of literature to develop a multi-faceted understanding of literary elements.
4. Use appropriate and relevant evidence from literary texts to conduct literary analyses.
5. Organize and structure ideas in a logical, cohesive, and clear manner to support a literary analysis.
6. Engage with (paraphrase, analyze, and respond to) other writers' ideas and styles to support their literary analysis.

7. Use critical thinking skills to consider how the author communicates a larger theme or message within a text.

### **ENG 110 Introduction to Screenwriting (3)**

This course is an introduction to and overview of the elements of structure, theme, plot, character, and dialogue in writing for film. Students will critically analyze professional scripts, view model examples of film writing, and work on their own screenplay. Students will have the opportunity to read and critique one another's screenplays in a workshop setting.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Understand the differences of visual and prose storytelling;
2. Develop workable short script premises with clear, vivid, dimensional and active characters;
3. Learn 3-part story structure (set-up, rising action, resolution) while crafting effective loglines and write outlines;
4. Build scenes into sequences using conflict and tension;
5. Write dialogue with a strong point of view and larger thematic purpose;
6. Give and receive constructive, targeted feedback for revising and clarifying.

### **ENG 204 Interdisciplinary Reading, Writing and Research (3)**

This course is a portal course to upper division coursework, designed to refine skills in reading, writing and critical thinking and to develop new skills in research across the disciplines.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Proficiently articulate a complex argument consistent with the assignment and audience.
2. Review research literature and generate thoughtful written and verbal responses to them.
3. Demonstrate a developed engagement with conventions and styles appropriate to a research essay in the humanities.
4. Select and integrate credible, relevant evidence to develop an argument in a longer research essay
5. Demonstrate the ability to choose a well-developed structure that logically and coherently supports a research essay.
6. Engage in a layered and complex manner with other writers' ideas and styles to support their own purpose or argument.
7. Demonstrate critical thinking skills through using logical, independent, and creative thinking to identify and communicate meaningful implications of a complex research-based argument or analysis.



8. Demonstrate an introductory understanding of locating, evaluating, using, and synthesizing a broad range of source materials, citing as appropriate.

### **ENG 210 Creative Writing (3)**

This course explores literature from the writer's point of view, attending to the ways in which each author develops voice, music, character, story, and situation. We will study and experiment in writing in a variety of genres, including poetry, drama, fiction, and memoir.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Understand and use a range of literary tools and techniques, including rhyme, metaphor, allusion, conflict, dialogue, theme, flashback, foreshadowing, and point of view;
2. Draft paragraphs, scenes, stories in response to instructor- and student-generated prompts;
3. Read and respond critically to peer work;
4. Comfortably submit stories for publication.

### **ENG 211 Creative Writing: The Personal Essay (3)**

This course teaches students techniques for developing narrative essays that reflect personal points of view, experiences, inquiries and analyses.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Compose a personal essay that communicates clearly and effectively to their audience;
2. Identify and use the vocabulary of creative writing critique.
3. Participate effectively in writing workshops in which they both present their own work to their peers, and provide feedback to others on their work.

### **ENG 220 Modern World Literature (3)**

This course is a comparative introductory study of literature from a variety of genres, cultures, societies, and traditions across the 19th-, 20th- and 21st- centuries.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Analyze works of literature using literary critical concepts;
2. Actively participate in classroom discussions focused on the close reading of literary texts;
3. Write a well-organized, grammatically correct essay with a clear, focused thesis on a literary topic.

### **ENG 234 Genres of Short Fiction (3)**

This course offers an introduction to the distinctive literary forms of the short story. Literary works read are by authors of diverse cultures.

#### **Course Learning Outcomes**

*Students who complete the course will be able to:*

1. Analyze works of literature using literary critical concepts;
2. Actively participate in classroom discussions focused on the close reading of short literary texts;
3. Write a well-organized, grammatically correct essay with a clear, focused thesis on a literary topic.

### **ENG 243 Critical Thinking (3)**

This course strengthens students' ability to understand and evaluate arguments – both stated and implied. Through reading and critically analyzing an array of texts, students learn to identify buried assumptions in their own and others' writing; recognize, evaluate, make and support inferences; and master the elements of strong written argument: accurate, clear, coherent and fluent prose.

#### **Course Learning Outcomes**

*Students who complete the course will be able to:*

1. Understand and evaluate arguments, including both what is stated and what is implied;
2. Examine ideas as social constructs rather than absolute truths;
3. Identify buried assumptions in their own writing and in the writing of others;
4. Demonstrate mastery of the elements of written argument, that is, of accurate, clear, coherent, and fluent prose.

### **ENG 248 Modern American Literature (3)**

A seminar on works of selected American authors of the 20th century.

#### **Course Learning Outcomes**

*Students who complete the course will be able to:*

1. Become familiar with significant modern American literary texts;
2. Critically analyze works of literature from the field of modern American literature;
3. Write a grammatically correct, well-organized essay with a well-developed argument on a literary-critical topic related to modern American literature.

### **ENG 249 American Literature: Romanticism to the 20<sup>th</sup> Century (3)**

An in-depth examination of selected literary works of American authors from the late nineteenth century through the twentieth century. Through an array of writing assignments of

varying lengths, students will further develop their skills in literary interpretation and critical analysis, as well as essay writing and revision.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Become familiar with significant American literary texts of this period;
2. Critically analyze works of literature from the field;
3. Write a grammatically correct, well-organized essay with a well-developed argument on a literary-critical topic related to American literature.

### **ENG 251 Chicano Literature (3)**

This course is an introduction to contemporary and traditional literature created by Chicanas/os, including an exploration of its political, social, cultural, historical, and psychological context.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate knowledge of the field of Chicano literature;
2. Critically analyze works of literature from within this tradition, applying literary critical concepts;
3. Write a grammatically correct, well-organized essay with a well-developed argument on a literary-critical topic.

### **ENG 273 Shakespeare (3)**

This course is an introduction to Shakespearean drama and poetry through a study of representative comedies, histories, tragedies, and sonnets.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of Shakespeare's life and times and evaluate their influence on his works;
2. Demonstrate an understanding of the major elements central to the plays of William Shakespeare studied in the course;
3. Demonstrate knowledge of the dramatic principles of comedy, history, and tragedy in Shakespearean drama.

### **ENG 284 Multicultural Literature (3)**

This course is a study of representative literature by various American multicultural writers.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate knowledge of the literary contributions of multicultural writers in the United States;
2. Demonstrate the ability to analyze themes, styles, and literary conventions of literary works;
3. Write a grammatically correct, well-organized essay with a well-developed argument on a literary-critical topic.

### **EST 204 Environmental Science (3)**

This course introduces the field of environmental science and surveys current environmental issues, including pollution, climate change, energy, conservation, and agriculture. We will investigate environmental justice, the study of how social inequities shape the interaction of humans with their environment, and we will look at environmental law, philosophy, and ethics. These complex issues will require students to practice rigorous scientific and social analysis.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Describe the scientific methodologies used in environmental science and what questions they can answer.
2. Propose scientifically grounded solutions to environmental issues and critically analyze other solutions.
3. Analyze complex environmental issues from scientific, ethical, and policy perspectives.
4. Explore an environmental issue of interest and learn how to research and weigh evidence.

### **GEO 215 Geology (3)**

This course provides a study of the composition of the earth and the processes responsible for its present characteristics. Topics covered include plate tectonics, rocks and minerals, volcanism, metamorphism, sedimentation, weathering, erosion, landforms, earthquakes, glaciers, and mineral resources.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Explain the characteristics and conditions of formation of the three rock types; igneous, metamorphic, and sedimentary;
2. Explain the rock cycle by differentiating all three rock types in order to identify and describe the various geological processes involved;
3. Explain the Plate Tectonic Theory and identify tectonic features of the world.

### **HED 220 Introduction to Public Health (3)**

This course introduces public health concepts and issues through an examination of public health's history, core functions and implementation. We will investigate the factors that shape health and wellness in populations, focusing on health disparities, prevention, and social and behavioral factors. Students will analyze complex public health policy decisions using scientific, social, and ethical frameworks.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Describe and compare different public health research methods, including basic quantitative concepts for measuring risk and outcomes.
2. Analyze and apply strategies for disease control and prevention.
3. Evaluate how social factors influence health risk and disease outcomes, particularly with regard to health
4. Propose and analyze solutions to public health issues, considering scientific merit, ethical issues, policy-making considerations, and more.

### **HIS 101 U.S. History I (3)**

United States history from pre-Columbian period to 1865, with particular attention to the themes of politics, economics, geography, race, gender and culture. Students are introduced to the discipline of history and to the skill of reading and interpreting primary sources from a variety of text forms.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Identify and describe significant persons, events, and institutions in American history through 1865;
2. Identify major themes in the development of American culture, society, and politics through 1865;
3. Write a well-organized essay with an original thesis on a significant historical question that draws on multiple primary and/or sources.

### **HIS 102 U.S. History II (3)**

This course is a survey of United States history from 1865 to date, with particular attention to the themes of politics, economics, geography, race, gender and culture. Students are introduced to the discipline of history and to the skill of reading and interpreting primary sources from a variety of text forms.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Identify and describe significant persons, events, and institutions in American history

- from 1865 to the present;
2. Identify major themes in the development of American culture, society, and politics from 1865 to the present;
  3. Write a well-organized essay with an original thesis on a significant historical question that draws on multiple primary and/or sources.

### **HIS 103 European History (3)**

A chronological survey of the development of European civilizations from the pre-history era to the period of European colonialism. The study of historical events and developments are contextualized in changing social, political, economic, religious and geographic developments.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Describe broadly the political development of the European continent;
2. Explain the most significant political, economic, and cultural events that have shaped the European continent;
3. Conduct research analyzing both primary and secondary sources related to European history.

### **HIS 127 Latin American History I (3)**

This course covers the heritage and development of Latin America from its indigenous beginnings through European exploration and colonialism to the modern states. The course emphasizes the economic, social, cultural and political forces that shaped these states.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate a working knowledge of key social, cultural, political and economic developments in Latin American history;
2. Be able to identify the geography of the region including countries, major cities, and important geographic features;
3. Develop well-organized and supported theses and argumentative essays on a topic in Latin American history.

### **HIS 130 Modern African History (3)**

This course will examine pre-colonial African communities and societal organization; African ways of knowing; the Trans-Atlantic Slave Trade; the Berlin Conference and the onset of colonialism; African responses to colonialism; the growth of African nationalism; independence struggles; democracy; structural adjustment; civil society, gender; development; and globalization.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of African social organization, ways of knowing and economic life;
2. Demonstrate knowledge of the major developments, events, themes and systems characterizing the history of Africa;
3. Read analytically, draw conclusions and construct arguments verbally and in writing concerning topics in African History.

**HIS 131 South African History (3)**

This course will introduce students to the social and political history of South Africa from pre-colonial times to the post-apartheid years, starting with an examination of the region's early African societies, and moving to European contact and subsequent settlement and colonization patterns on the subcontinent.

**Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of key events, figures, places and themes in South African history;
2. Demonstrate critical knowledge of the major social, cultural, economic and political forces that have shaped the history of South Africa;
3. Write a well-organized, cogent essay with an original thesis concerning a topic in South African History.

**HIS 213 Human Civilization I (3)**

This course examines the political, social, cultural and economic history of human civilization from its beginnings to about 1715. The major focus will be on near Eastern, Mediterranean, and European developments. The student will also be introduced to Asian, African, and pre-Columbian American civilizations.

**Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate a broad general understanding of the sweep of human history and the roles of individuals, peoples, and cultures in establishing civilization as we know it;
2. Describe human events, ideas, and accomplishments generally recognized to be formative and fundamental to the history of civilization;
3. Analyze and discuss representative cultural works that have helped establish idealized relationships of humankind to the divine, to one another, and to nature—and that have attempted to define and explain beauty as necessary to the well being of the individual soul as well as of the larger society.

### **HIS 214 Human Civilization II (3)**

This course examines the political, social, cultural and economic history of human civilization from about the Middle Ages to the present. The major focus will be on social, economic, political, and intellectual developments during the period under consideration. Prerequisite: HIS 213.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate a broad general understanding of the sweep of human history;
2. Describe key human events, ideas, and accomplishments that have been formative and fundamental to the history of civilization;
3. Analyze and discuss representative historical cultural works that are considered fundamental to modern society.

### **HIS 220 California History (3)**

This course examines the social, cultural and historical development of California from before the 16<sup>th</sup> century to the present.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Describe the location and culture of California's indigenous peoples;
2. Compare and contrast the defining characteristics of the Spanish, Mexican, and American geographic exploration, settlement, and governing of California;
3. Analyze and describe California's political, social, and economic impact on the country and the world.

### **HIS 224 Asian History (3)**

This course provides an overview of the geographic, political, economic, religious and social structures of the civilizations of China, Japan and Korea from the Middle Ages to early modern times.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of key events, figures, places and themes in Asian history;
2. Demonstrate critical knowledge of the major social, cultural, economic and political forces that have shaped the history of Asia;
3. Write a well-organized, cogent essay with an original thesis concerning a topic in Asian History.



### **HIS 225 The American Experience (3)**

This course explores an array of historical, geographical, economic and cultural perspectives on the settling and development of the United States. Includes consideration of native inhabitants and the various communities that have migrated to the North American continent from the time of Columbus to the present.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Identify major themes and issues related to the ways Americans have historically expressed, institutionalized and contested identity;
2. Assess how struggles over American identity often cross disciplinary boundaries, simultaneously engaging visual and material culture, literature, history, politics, and popular culture;
3. Appreciate the cultural diversity of the American experience, especially in terms of class, ethnicity, gender, and race.

### **HIS 226 Ancient African History (3)**

This course is intended to convey the range and diversity of people, events, objects and places in Ancient Africa from 2.5 million years ago until the 19<sup>th</sup> century. It begins with an investigation of the origins of civilization, the growth of farming and cities, and European interest in Africa, in order to gain an understanding both of the African past and the way in which African culture has influenced and been influenced by other cultures.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of key events, figures, places and themes in Ancient African history;
2. Demonstrate critical knowledge of the major social, cultural, economic and political forces that shaped the history of Ancient Africa;
3. Write a well-organized, cogent essay with an original thesis concerning a topic in Ancient African History.

### **HIS 227 Ancient World History (3)**

This course provides an introduction to the peoples of the ancient world. Students investigate various aspects of ancient world cultures including geography, politics, history, art, literature and religion.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Think historically about the world in terms of patterns and trends in human experience;
2. Acquire a broad understanding of the ancient world from a variety of perspectives,

including: religion, industry, literature, history, geography, education, customs, law, and philosophy;

3. Appreciate and utilize primary texts (in translation);
4. Write a well-organized, cogent essay with an original thesis concerning a topic in Ancient World History.

### **HIS 228 Mexican History (3)**

This course explores the development of modern Mexico, including the pre-Columbian Native American peoples, Spanish influences, 19th century Mexican independence and 20th century revolution, contemporary issues, relations with the U.S. and Mexican and Mexican-American culture.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of key events, figures, places and themes in Mexican history;
2. Demonstrate critical knowledge of the major social, cultural, economic and political forces that have shaped the history of Mexico;
3. Write a well-organized, cogent essay with an original thesis concerning a topic in Mexican History.

### **HIS 229 History of India: 19<sup>th</sup> and 20<sup>th</sup> Centuries (3)**

This course will focus on the history of India during the nineteenth and twentieth centuries. Students will learn, in particular, about British rule in India and the development of Indian nationalism. Some of the broader themes explored in this course are religion and politics, the nature and scope of imperialism in India, and the formation of national identity.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of key events, figures, places and themes in Indian history;
2. Demonstrate critical knowledge of the major social, cultural, economic and political forces that have shaped the history of India;
3. Write a well-organized, cogent essay with an original thesis concerning a topic in Indian History.

### **HIS 230 Early Latin American History (3)**

This course examines the social, political, economic, and cultural foundations of Latin America from pre-colonial to the Conquest in the fifteenth century to independence in the early nineteenth century.

### **Course Learning Outcomes**

#### ***Students who complete the course will be able to:***

1. Describe the location and culture of the indigenous people of Mesoamerica and South America;
2. Compare and contrast the social, political, and economic dynamics of colonization based on primary and secondary sources;
3. Analyze and explain the principal forces that contributed to continuity and change in Latin American cultures as a result of conquest and colonization;
4. Describe the issues of race, ethnicity, class, and gender in shaping Latin American cultures.

### **HIS 233 African-American History (3)**

This course provides an analysis of the African American experience in the United States from the Colonial period to the present, including forced migration from Africa, slavery, emancipation, the Jim Crow laws, and the Civil Rights movements. Also studied are the social, economic and political effects brought about by urbanization and the significant political, scientific and cultural contributions of African Americans.

### **Course Learning Outcomes**

#### ***Students who complete the course will be able to:***

1. Analyze and explain the most significant political, economic, and cultural events that have shaped the lives of African Americans in the United States;
2. Compare and contrast the social and political conditions of African American experience according to gender, occupation, status, and region;
3. Explain the role that African American communities and individuals have played in shaping the United States.

### **HIS 240 World History (3)**

This course is a survey of world history from Medieval to early modern times, tracing the developments of the geographic, religious, political and social, cultural and technological changes during the period AD 300-1789.

### **Course Learning Outcomes**

#### ***Students who complete the course will be able to:***

1. Demonstrate an ability to evaluate interpretations of historical events by analyzing secondary accounts and primary documents;
2. Demonstrate an understanding of the interplay of geographic factors, family patterns, religion, and military organization in the development of larger states in Afro-Eurasia, China, Europe, and India;
3. Describe the impact of the Scientific Revolution and the initial stages of industrialization on social groups;

4. Describe the impact of colonial expansion in the non-industrialized world and the social movements that were created in response to this colonial rule.

### **LA 99 Introduction to College (Non credit)**

This course introduces students to skills that will help them successfully navigate their college experience and become active members of MTC's academic community. In this course, we will focus on academic strategies and resources which will help students be successful as they pursue their education. By the end of the course, students will have a set of tools for college success, a greater understanding of their identity as a college student, and an academic pathway to reach their educational goals.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Learn an array of skills, strategies, and support systems to succeed in their college coursework and facilitate lifelong learning;
2. Identify why they are going to college by defining their own educational goals and academic pathways for achieving those goals;
3. Reflect on their own educational experiences and to become empowered by their own identities as college students.
4. Participate as engaged members of MTC's learning community in academic courses, extracurricular activities, and in the overall life of the college.

### **MTH 50A Mathematics Foundations I (Non credit)**

The purpose of this course is to learn how to do arithmetic and apply it to daily life. Topics include addition, subtraction, multiplication and division of whole numbers, decimals, and fractions; order of operations; exponents and roots; and applications of these concepts. The course will reinforce multiplication tables and number sense and will introduce rates, ratios, and proportions.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Perform arithmetic operations on whole numbers by hand;
2. Perform arithmetic operations on fractions and mixed numbers;
3. Perform arithmetic operations on decimals and convert between fractions and decimals;
4. Simplify arithmetic expressions using the order of operations;
5. Solve problems involving rates, ratios and proportions;
6. Use arithmetic to solve word problems that model real-life applications.

### **MTH 50B Mathematics Foundations II (Non credit)**

This course will cover fundamentals of math including ratios and proportions; signed numbers;

introduction to variables; coordinate axes and graphing; and applications of these concepts. The course will build on the foundation of concepts from Math 50A and introduce more advanced topics in math in preparation for Elementary Algebra.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Perform calculations involving ratios, proportions and percentages;
2. Perform calculations involving negative and positive real numbers;
3. Solve word problems involving ratios, proportions, percentages, and signed numbers.
4. Solve linear equations in one variable;
5. Graph points and lines in the Cartesian coordinate system;
6. Read and interpret a variety of charts and graphs;
7. Use variables and algebraic methods to solve word problems.

### **MTH 99 Elementary Algebra (Non credit)**

This course is an introduction to algebra, intended to prepare students for success in Intermediate Algebra. Elementary Algebra emphasizes conceptual understanding, procedural fluency, and problem solving. Topics include solving linear equations and inequalities; developing and using formulas and algebraic expressions; graphing linear functions; solving systems of linear equations; factoring polynomials; and applying algebra skills to real world situations.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Solve linear equations and inequalities in one variable;
2. Graph equations in two variables in the Cartesian coordinate system;
3. Solve systems of linear equations in two variables;
4. Simplify and factor expressions involving exponents and polynomials
5. Solve quadratic equations in one variable by factoring;
6. Use algebra skills to solve word problems inspired by real-world problems.

### **MTH 110 Business Math (3)**

Business Math is an introduction to the fundamentals of financial concepts used within business enterprises. The development of skills in measurements by the use of fractions, cash and accrual methodology, taxation, payroll processing, cash controls, as well as understanding of basic business statistics.

### **Course Learning Outcomes:**

***Students who complete the course will be able to:***

1. Demonstrate an understanding of the appropriate use of financial terminology when describing business processes;
2. Identify with fractions used through its use in equations as it applies to the business

- enterprises;
3. Define the elements of business financial statements and the proper use as it applies to business entities;
  4. Apply the functions of the business math equations in processing payroll, and preparing governmental tax forms;
  5. Demonstrate knowledge and understanding of the basic mathematical concepts and financial statements and their functions, and duplicate these in all homework assignments and partner projects.

### **MTH 115 Intermediate Algebra (3)**

This course builds on the concepts from MTH 99, exploring more advanced topics in algebra. Topics include functions and their graphs; rational functions; exponential and logarithmic functions; systems of linear inequalities; and quadratic functions and inequalities. Emphasis is on understanding the patterns, properties and graphs of these functions as well as the results of applying transformations. In addition, students explore applications in real world contexts.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Interpret and analyze functions and use them to solve real-world word problems;
2. Graph parent functions and their transformations;
3. Identify key features of a graph;
4. Solve problems involving logarithmic and exponential functions, and more generally, inverse functions;
5. Solve systems of equations and inequalities;
6. Demonstrate proficiency on the MTC Math Signature Assignment.

### **MTH 125 Geometry (3)**

Addresses basic geometry terms and concepts including: point, line, angles, general polygons, congruency, triangulation, similarity, area, circles, solid geometry, inequities and informal constructs. This course will teach concepts and theorems of Geometry as the study of size, shape and position of 2-dimensional shapes. We will learn about lines and angles, as well as perimeter, area and volume of common shapes.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Use geometric vocabulary accurately to identify and describe geometric objects and relationships;
2. Apply formulas for perimeter, area, volume, and surface area to solve practical geometric problems;
3. Use given information and valid logical reasoning to establish geometric relationships in proofs.

### **MTH 135 Statistics (3)**

This class introduces statistical concepts and methods for understanding measurements and data. Topics include grouping of data, measures of central tendency and dispersion, probability concepts, sampling, statistical estimation, and statistical hypothesis testing.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Use graphs and numerical summaries effectively to understand sets of data;
2. Use probability to understand random events and apply probability to sampling;
3. Relate two different numerical or categorical variables;
4. Compute statistical measures, including for hypothesis testing, and interpret the significance of the result;
5. Apply statistical concepts to real-world applications;
6. Interpret and assess statistical measures presented by others;
7. Recognize potential biases in different types of variables, data, and studies.

### **MTH 220 Pre-Calculus I (3)**

Preparation for calculus or other courses requiring depth in algebraic background. Topics include trigonometric functions and identities; vector geometry; polar coordinates; and applications of these topics.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Perform trigonometric calculations using the unit circle;
2. Graph parent trigonometric functions and their transformations;
3. Simplify expressions using trigonometric identities;
4. Prove trigonometric identities;
5. Perform operations on and between vectors;
6. Convert between rectangular and polar

### **MTH 221 Pre-Calculus II (3)**

This course expands on the trigonometry covered in Pre-Calculus I and introduces students to additional topics required in Calculus and other advanced mathematics courses. Topics include systems of equations and matrix algebra; conic sections; polynomial and rational functions; sequences and series; and mathematical logic.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Solve systems of linear equations using matrix methods;
2. Identify conic sections and perform related computations;
3. Find complex, rational, and irrational roots of polynomials;

4. Identify arithmetic and geometric series, and perform related computations;
5. Prove mathematical statements using induction and/or the binomial theorem.

### **MTH 226 Pre-Calculus with Analytical Geometry (3)**

Advanced algebra with analytic geometry. This course includes topics from college algebra; matrices, vectors, conic sections, transformations of coordinate axes, polar coordinates, lines and surfaces in space, quadric surfaces.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Simplify and perform algebraic operations on polynomial, rational, exponential, logarithmic, and trigonometric functions;
2. Identify, analyze and graph functions;
3. Use mathematics to model and solve real-world problems

### **MTH 230 Calculus I (3)**

Differential calculus. This course covers the concepts of limits and continuity; exponential and logarithmic functions; techniques of differentiation and integration; applications of the derivative and the integral. Prerequisite: MTH 115, MTH 220, MTH 221.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. State and apply basic definition, properties, and theorems of first semester calculus;
2. Calculate limits, derivatives, definite integrals, and indefinite integrals of algebraic and transcendental functions;
3. Model and solve application problems using derivatives and integrals of algebraic and transcendental functions.

### **MTH 231 Calculus II (3)**

Integral calculus. This course covers the concepts of the indefinite integral, area, fundamental theorem of calculus, methods of integration; applications to volume and arc length, and physical problems.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Describe a region by boundaries or inequalities in  $x$  and  $y$ , draw a solid revolution, and set up an integral for the volume;
2. Analyze an integral to determine the correct method of integration;
3. Apply theorems to determine if a series converges or diverges.



### **MTH 232 Calculus III (3)**

This course covers the concept and contribution of infinite series to the understanding of limits and thus the theoretical basis of derivatives and integrals. Topics also covered include: calculation of vectors and three-dimensional space, determination of directional derivatives and gradients, use of partial derivatives and the chain rule, comprehension of curves, surfaces, maxima and minima as well as evaluation of multiple integrals.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. State and apply basic definitions, properties and theorems of multivariable calculus;
2. Compute and apply derivatives and multiple integrals of functions of two or more variables;
3. Compute and apply vector fields, line integrals, and surface integrals;
4. Analyze multivariable functions.

### **MTH 243 Calculus IV (3)**

This course covers the study of line and surface integrals including Stoke's and Green's theorem, point-set theory and the use of the Bolzano – Weierstrass theorem and the Heine – Borel theorem, as well as the fundamental theorems on continuous functions and the Intermediate-value theorem. The course will also include theory of integration including: Riemann's Double integrals, iterated integrals, Improper and Stieltjes Integrals. The later part of the course will involve improper integrals of the second and mixed type, the gamma function, and Stirling's formula, concluding with the study of Fourier series and integrals with emphasis on Fourier's Convergence Theorem and the graphical study of a Fourier Series.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Find extreme values of multivariable functions, with or without constraints;
2. Compute and apply double and triple integrals;
3. Change variables in multiple integrals, including changing from rectangular coordinates to polar, cylindrical, or spherical coordinates;
4. Use and compute line and surface integrals;
5. Apply Green's Theorem, Stokes' Theorem and the Divergence Theorem.

### **MTH 252 Discrete Mathematics (3)**

Topics in discrete mathematics. This course covers the study of elementary logic, set theory and relations; methods of proof; induction, enumeration techniques, recurrence relations, trees and graphs; Boolean algebra, algorithm analysis; counting and combinatorics.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Apply principles of logic to analyze validity of arguments;
2. Apply mathematical induction to problems in sequences and series;
3. Write and analyze proofs.

### **MTH 260 Differential Equations (3)**

This course will explore various strategies and methods to analyze and solve ordinary differential equations. This course will introduce partial differential equations as well as techniques and some applications of integral and differential calculus, transcendental functions, analytic geometry, sequences, series, and applications of differential equations.

#### **Course Learning Outcomes**

*Students who complete the course will be able to:*

1. Solve various science and engineering application problems using differential equations;
2. Solve non-homogeneous linear differential equations by the method of variation of parameters, and by either undetermined coefficients or inverse operators;
3. Solve first order differential equations by a variety of methods.

### **MTH 287 Linear Algebra (3)**

Elementary theory of vector spaces. This course covers the study of linear independence, bases, dimension, linear maps and matrices, determinants, orthogonality, eigenvalues and eigenvectors.

#### **Course Learning Outcomes**

*Students who complete the course will be able to:*

1. Determine the number of solutions to a linear system. If there are an infinite number of solutions, then the student will be able to determine how many arbitrary parameters the solution has;
2. Identify a basis for a vector space;
3. Identify a vector space.

### **MUS 212 Music Appreciation (3)**

A study of great music and great composers from medieval times through the 20th century. Includes basic elements of music and an introduction to the orchestra.

#### **Course Learning Outcomes**

*Students who complete the course will be able to:*

1. Aurally identify stylistic and historical developments in music;
2. Demonstrate an understanding of how the elements of music are based on music theories and structures;
3. Articulate in writing their aesthetic perceptions and responses to the art of music.

### **PHL 270 Social Ethics (3)**

This course is an introduction to the philosophical field of ethics. This involves understanding major philosophers' theories and arguments, some common philosophical terminology, as well as the tools of analysis that philosophers have honed for over two millennia.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Read, interpret and understand central methodological theories in ethics;
2. Apply philosophical theories to contemporary moral problems;
3. Understand and critically assess ethical viewpoints and issues;
4. Write critically about classic and contemporary moral issues.

### **PHL 271 Introduction to Philosophy (3)**

This course is an introduction to the field of philosophy, which questions the foundations of thought, knowledge and behavior. Students consider the perspectives and worldviews of the great thinkers of the past, from Socrates to Sartre, including some non-Western voices. From their consideration of these thinkers, students will begin to develop and raise their own questions about the foundational issues of how and what we think, do, and know, and how these impact how we live and believe.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Interact with philosophical texts using critical thinking methodology, both in discussion and in writing;
2. Apply philosophical reasoning to modern issues and situations;
3. Write a well-organized analytical essay with a strong, original thesis.

### **PHL 274 Introduction to Eastern Philosophy and Buddhism (3)**

This course examines the beliefs and practices of Buddhism in the context of Eastern religious/philosophical traditions. Studies include cultural expressions, history and the place of these traditions in the world.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Identify assumptions, concepts, and modes of reasoning found in a variety of Buddhist, Confucian, Daoist, Hindu, and other Eastern texts that utilize carefully crafted lines of argumentation to address philosophical problems such as epistemology, metaphysics, and ethics;
2. Explain how particular lines of inquiry, argumentation, and reasoning have shaped Eastern worldviews and values;
3. Analyze and evaluate the assumptions and teachings found in various Eastern

philosophical texts.

### **PHY 154 Introductory Physics with Lab (4)**

Apply fundamental concepts of physics (such as motion, energy, fluids, waves, electricity, modern physics) to common real-world phenomena, using algebra-level math while emphasizing verbal logic, critical analysis and rational thought.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Solve basic problems using the basic principles of physics, together with logic and critical thinking.
2. Take physical measurements and analyze results to draw conclusions about a system under investigation, including whether data supports or refutes a given physical model.
3. Critically evaluate physical data and arguments encountered in modern life, including discussions in politics and the media.
4. Explain physical reasoning, both orally and in writing. Work effectively in groups on a common project.
5. Evaluate the role of social context in shaping physics. Look at examples in the lives of notable and diverse figures in physics.

### **POL 241 American Government (3)**

A study of the principles and problems of American government, including the U.S. Constitution and the concept of Federalism, and the organization and functions of federal, state and local governments.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Identify essential elements of the United States political system, including the different branches of government and the United States Constitution;
2. Evaluate the key institutions and processes of democracy within the United States;
3. Think and write critically about varying perspectives and ideologies related to American politics.

### **PSY 121 Social Psychology (3)**

The purpose of this course is to introduce students to the field of social psychology, with particular attention to the importance of social conditions in shaping behaviors, identities, beliefs, and perceptions.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate a solid understanding of basic social psychological principles and methods;

2. Read, critique, and write about empirical research;
3. Design experimental studies to test their own ideas.

### **PSY 122 Psychology of Family (3)**

This course is an overview of developmental and systematic theories of family functioning with emphasis on the impact of family on individual development.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate familiarity of the major theories, concepts, terminology, and empirical findings involved in personal and family behaviors;
2. Analyze the psychology of the family structure related to marriage patterns, changes, social function, and cross-cultural differences in marriage and family;
3. Demonstrate an understanding of interactions between family relationships and a person's perception, expectations, attitudes, and behaviors.

### **PSY 211 Abnormal Psychology (3)**

This course is an overview of the major theories, concepts, issues, data and research methodologies of abnormal psychology. The emphasis of the course is on assessment, treatment and prevention.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Apply critical thinking, skeptical inquiry, and when possible, the scientific approach to solve problems related to behavior and mental processes;
2. Demonstrate familiarity with primary symptoms of mental disorders and procedures used to diagnose and evaluate abnormal behavior;
3. Demonstrate familiarity with theoretical models of abnormal behavior and treatments based on these different theoretical orientations;
4. Examine basic research methods and design in abnormal psychology.

### **PSY 221 General Psychology (3)**

Introduction to the principal areas, problems and concepts of psychology: perception, thinking, motivation, personality, and social behavior.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Identify basic research methods and ethical considerations in the study of behavior;
2. Distinguish varied theoretical orientations, processes, and concepts on behavior;
3. Examine human development across the lifespan;
4. Identify psychological disorders and treatments;

5. Apply key tenets of psychology to everyday life.

### **PSY 255 Child Growth and Development (3)**

This course is an in-depth study of theory and research concerning the childhood period from conception through pre-adolescence. Genetic maturational factors along with their interaction with experiential factors will be examined as to their effect upon behavior. Both pathogenic and adaptive patterns will be addressed with a view to facilitating optimal development and socialization of children.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Demonstrate major concepts, terminology, and empirical findings in the field of child growth and development;
2. Demonstrate familiarity with and critically evaluate major theories and research in child growth and development;
3. Explain the structure and functioning of the brain and nervous system as relates to behavior and mental processes;
4. Demonstrate understanding of the types of development and the environmental influences that affect an individual from birth through adolescence.

### **REL 280 Religion in America (3)**

This course studies the significant religious groups, leaders and trends from colonial times to the present. Attention will be given to the growth of religious liberty, relation of religion to social protest, religion and the courts, religious concerns of various ethnic and national groups. The course will analyze how current religious developments are impacting society.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Describe the specific groups, leaders and issues that have contributed significantly to the character of religion in America including the role of religious freedom, tolerance, and separation of church and state;
2. Articulate the situation and role of religion in American society today
3. Craft a research paper on religion on American that engages both primary and secondary sources.

### **SOC 230 Sociology (3)**

This course provides an introduction to society, culture and personality. Major problem areas examined are the interaction of culture and personality, socialization, social change, prejudice, and large group behavior.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Explain the historical foundations and theoretical concepts of sociology;
2. Identify social trends, policies, and practices using sociological paradigms;
3. Describe the role of the individual within a social system and the impact social institutions have on individuals;
4. Analyze issues of social diversity from a sociological perspective.

**SPA 101 Elementary Spanish I (4-5)**

This class introduces students to engaging in basic written and oral interactions, such as asking and answering questions, providing information, and expressing feelings and emotions on basic topics such as family, daily routines and leisure time as well as survival situations, such as ordering meals, buying things, etc.

**Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Functionally express themselves using the Spanish language through verbal and written communication;
2. Demonstrate reading comprehension of the Spanish language utilizing relatively short writings of both a formal and an informal nature;
3. Communicate through reading and writing in the Spanish language at the novice-high to intermediate-low level;
4. Communicate through speaking and listening in the Spanish language at the novice-high to intermediate-low level;
5. Compare and contrast U.S. culture and culture(s) of the Spanish language.

**SPA 102 Elementary Spanish II (4-5)**

The second semester, first year of Spanish will expand and consolidate control of basic grammatical structures and vocabulary focusing on all four language skills: speaking, listening, reading, and writing.

**Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Functionally express themselves using the Spanish language through verbal and written communication;
2. Demonstrate reading comprehension of the Spanish language utilizing relatively short writings of both a formal and an informal nature;
3. Communicate through reading and writing in the Spanish language at the intermediate-mid level;
4. Communicate through speaking and listening in the Spanish language at the intermediate-mid level;
5. Compare and contrast U.S. culture and culture(s) of the Spanish language.

### **SPA 211 Intermediate Spanish I (4-5)**

Second year Spanish will continue the development of proficiency in the language, expanding vocabulary and grammatical structures, in order to discuss topics from personal interests to current affairs. Functions will include present, past and future narrations, more detailed descriptions, and comparisons. Readings and audiovisual examples of authentic cultural material will lead to a deeper understanding of Hispanic culture.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Functionally express themselves using the Spanish language through verbal and written communication;
2. Demonstrate reading comprehension of the Spanish language utilizing relatively short writings of both a formal and an informal nature;
3. Communicate through reading and writing in the Spanish language at the intermediate-mid to intermediate-high level;
4. Communicate through speaking and listening in the Spanish language at the intermediate-mid to intermediate-high level;
5. Compare and contrast U.S. culture and culture(s) of the Spanish language.

### **SPA 212 Intermediate Spanish II (4-5)**

This class will expand the existing knowledge of the language and the culture, integrating more aspects of traditions, customs, and artistic expressions from Spain and Latin America, with more extensive readings, audiovisual sources, in-class discussions, and compositions.

#### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Functionally express themselves using the Spanish language through verbal and written communication;
2. Demonstrate reading comprehension of the Spanish language utilizing relatively short writings of both a formal and an informal nature;
3. Communicate through reading and writing in the Spanish language at the intermediate-high to advanced-low level;
4. Communicate through speaking and listening in the Spanish language at the intermediate-high to advanced-low level;
5. Compare and contrast U.S. culture and culture(s) of the Spanish language.

### **SPA 221 Introduction to Spanish Literature (3)**

This course provides the student with an introduction to Spanish literature, including short stories, plays and poems. It aims to increase the student's ability to read, understand and



interpret literature as well as improve written and spoken language skills. The course intends to strengthen the student's general familiarity with literary genres, themes and techniques. In addition, it uses the writings as a window to a range of cultures, histories and perspectives.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Understand the development of Spanish literature in its chronological sequence;
2. Discuss from a critical perspective the major literary works, authors and movements that have influenced the literature of Spanish speaking cultures;
3. Write critical essays in Spanish demonstrating skills in literary analysis.

### **SSC 202 Comparative Religion (3)**

Introduction to the psychological and sociological components and functions of religion and examination of common themes found across major religions. Contributions of Weber, Durkheim, Jung, James, Freud, Adler, Allport, Maslow, and Erikson will be considered, together with Eastern philosophical approaches. Our perspective will be one of cultural relativity.

### **Course Learning Outcomes**

***Students who complete the course will be able to:***

1. Learn the basic principles of the academic study of religion, and how these differ from other approaches (confessional, faith-based, anti-religious, polemical, etc.);
2. Learn about the history, sacred texts, rituals, and contemporary practice of major world religious traditions (Islam, Judaism, Christianity, Hinduism, Buddhism);
3. Develop analytical skills that can be used to learn more about these and other religious traditions (Shinto, Sikhism, Jainism, Yoruba, atheism, etc.);
4. Improve critical thinking and writing skills.