KINGSBOROUGH

COMMUNITY COLLEGE

KINGSBOROUGH COMMUNITY COLLEGE
of the City University of New York

COURSE LEARNING OUTCOMES
2008-2009

KINGSBOROUGH IS CUNY

Contents

I – Art

ART 31 – Visual Experience
ART 32 – Art in Spain
ART 33 – Survey of Art History I
ART 34 – Survey of Art History II
ART 35 – Modern Art I
ART 36 – Modern Art II
ART 38 – Renaissance Art

- Demonstrate a working knowledge of art and art history through critical thinking, testing and writing.
- Analyze a work of art formally and within a historical context orally and through writing.
- Formulate intelligent questions and initiate discussion about visual objects.
- Communicate their ideas about visual objects effectively in writing and speaking.
- Recognize the intrinsic value of visual objects and develop respect and appreciation for visual objects for all cultures.

ART 37 – African, Oceanic and Native American Art

- Demonstrate an understanding of the difference between small scale societies, complex societies and civilizations and their respective cultural productions, specifically in the visual arts
- Demonstrate the ability to identify differences between various cultures studied.
- Demonstrate the ability to describe art work formally as well as regarding its religious and/or social function.
- Demonstrate knowledge of basic relevant time periods.
- Demonstrate an ability to communicate in writing through a 5-6 page research paper, and verbally by asking pertinent questions and making relevant comments in class.

ART 40 – Designing with Type

- Demonstrate a working knowledge of typography as a design element and an understanding of the anatomy of a letterform, kerning, recognition of serif and sans serif fonts, body copy and headlines.

ART 43 – Digital Art Illustration

- Demonstrate a working knowledge of appropriate software for doing vector-based digital art, using an assortment of drawing, painting and multi-layered rendering techniques combined with typography to create graphic design portfolio pieces.

ART 45 – Computer Art

- Demonstrate a working knowledge of the software necessary for the field of desktop publishing, including design, page layout, printing and publishing.

ART 46 – Computer Assisted Illustration

- Demonstrate a working knowledge of digital image making, scanning, color and tonal corrections, retouching, and illustrating using the appropriate software to create portfolio pieces.

ART 44 – Still Life Painting

- Students produce a group of painting exercises of value of color, and paintings based on direct observation and the history of still-life painting.
- Students will produce a portfolio of paintings.
- Students participate in peer evaluations.

ART 51 – Photography I
ART 52 – Photography II

- Demonstrate the skills to produce exposed black and white 35 mm film, contact sheets and enlargements through the appropriate application of darkroom and dry-mounting techniques.

ART 53 – Photojournalism I
ART 54 – Photojournalism II

- Students demonstrate that they have learned these skills by producing and submitting contact sheets and enlargements of images based on class assignments.
- They are required to shoot and develop several rolls of black and white film. After printing contact sheets of these assignments, they print many enlargements, using dodging and burning skills.
- They then edit and dry mount their final well printed images, and set up their photo essays.

ART 55 – Design I

- Students demonstrate an understanding of the vocabulary of design on a final exam and learned skills through the creation of portfolio pieces.

ART 57 – Drawing I

- Students will demonstrate that they have learned those skills through drawing assignments based on specific pictorial problems that relate to form, space, and technique.
- Students will be required to produce a series of drawings that exemplify the content of the drawing concepts.

ART 57 – Drawing II

- Students will demonstrate that they have learned those skills through drawing assignments based on specific pictorial problems that relate to form, space, composition and technique.
- Students will be required to produce a series of drawings that exemplify the content of the drawing concepts.

ART 59 – Painting I

- Students will produce a group of basic painting exercises of value and color, and several paintings based on direct observation of objects.
- Students will produce a portfolio of paintings.

ART 60 – Painting II

- Students will produce a group of paintings and technical exercises, based on direct observation of objects, in order to demonstrate that they have learned the necessary skills.
- Students will be required to produce a portfolio of paintings for evaluation.

ART 63 – Ceramics I

- Students will produce a group of basic ceramic objects using the 3 forming processes, such as, coiling, slab-building, and the potters wheel.
- Students will demonstrate an understanding of slip decoration through the effective use of one or more of the slip application techniques, including but not limited to, slip-trailing, scraffitto, inlay, wax-resist, paper-resist, and general paint brush techniques.
- Students will demonstrate an understanding of glaze application through the effective use of glazing techniques.

ART 64 – Ceramics II

- Students will produce a group of ceramic objects using the basic ceramic forming processes, such as, coiling, slab-building, and the potters wheel.

- Students will demonstrate an understanding of slip decoration through the effective use of one or more of the slip application techniques, including but not limited to, slip-trailing, scraffitto, inlay, wax-resist, paper-resist, and general paint brush techniques.
- Students will demonstrate an understanding of glaze application through the effective use of glazing techniques.

ART 66 – Printmaking I

- Student will become familiar with the techniques of monoprint, woodblock and linoleum printing, as well as drypoint. Students will also develop an understanding of the tools, materials and press required to make such prints. Studio practice and safety will be a necessary component of this course.

ART 67 – Printmaking II

- Student will be able to execute relief prints and intaglio prints in color using multiple plates. Students will also develop an understanding of the etching process using a metal plate and acid bath. Studio practice and safety will continue to be a necessary component of printmaking II as more sophisticated printing methods are used. The creative use of printmaking methods will be applied for expressive and conceptual ends.

ART 68 – Illustration

- Students demonstrate an understanding of various media including pencil, color pencil, pen and ink, markers, collage, etc/, color exaggeration, mood and composition through the creation of a minimum of four portfolio pieces.

ART 69 – Illustration Style

- Students demonstrate an ability to conceptually solve visual communication problems through an illustrator's point of view with an emphasis on mood and exaggeration through the creation of a minimum of four portfolio pieces.

ART 73 – Publication Design

- Students demonstrate an understanding of conceptual problem solving skills in the area of graphic design through the creation of portfolio pieces.

ART 74 – Experimental Typography

- Students demonstrate learned skills on a quiz and by meeting deadlines in the creation of portfolio pieces.

ART 75 – Introduction to Graphic Design and Advertising

- Students demonstrate a knowledge of the vocabulary and tools of graphic design and advertising and an understanding of conceptual problem solving skills through the creation of portfolio pieces and through meeting deadlines.

ART 80 – Ceramic Sculpture

- Students will produce a group of ceramic sculpture using any suitable forming process, such as, coiling, slab-building, and the potters wheel or a combination thereof.
- Students will demonstrate a thorough understanding of slip decoration through the effective use of one or more of the slip application techniques including but not limited to, slip-trailing, scraffitto, inlay, wax-resist, paper-resist, and general paint brush techniques.
- Students will demonstrate an understanding of glaze and glaze application through the effective use of glazing techniques.

ART 81 – Problems in Studio Art (Independent Study)

- As an independent study course, students will complete a studio project of advanced content, to be agreed upon by instructor and student at the beginning of the course, and executed on an informal schedule with a minimum of supervision.

ART 81 – Independent Study Graphic Design Internship

- Students demonstrate learned skills, meet deadlines, and set realistic goals for the work place environment.

ART 87 – Transparent Watercolor Painting

- Students will learn to manipulate paper, brush, transparent color and water in diverse combinations to achieve a coherent articulation of form, space, and light. Student will also learn to change and mix color through techniques of lifting and glazing. This will foster a more advanced understanding of color through the flexibility and rapidity of changes and experiments that working in watercolor permit. Students will also become familiar with the history of the medium in Western and Eastern cultures.

ART 88 – Intermediate Watercolor Painting

- Students will learn to build upon the manipulation of transparent color and a coherent articulation of form, space, and light as learned in Watercolor I. Students will also develop a personal vocabulary of painterly techniques and iconography for expressive and conceptual ends.

ART 94 – Digital Photography I

- Students demonstrate that they have learned these skills by producing and submitting photographs and enlargements of images based on class assignments.
- They are required to shoot and process several images, throughout the semester.
- They use the computer program, Adobe Photoshop, to refine their images and prepare them for printing.
- They then edit and dry mount their final well printed images.

II – Behavioral Sciences and Human Services

A – Anthropology

ANT 37 - Introduction to Anthropology

- After completing the section on physical/biological anthropology students should understand and be able to discuss the basics of primatology, human evolution, medical anthropology, molecular anthropology, forensic anthropology, and human physical diversity, including the concept of race. Students will learn to appreciate the importance of new technologies, such as DNA analyses, in tracing human origins, heritage and health, as well as crime solving.
- After completing the section on archaeology students should be able to grasp the significance of the archaeological record. They should understand the basics of excavation, the dating and analysis of human remains, artifacts, and ruins. They will also learn about the complexities of ownership, preservation, and interpretation of archaeological data.
- After completing the section on anthropological linguistics students should have an understanding of the core features of language and how language emerged. They will learn how historical linguistics are used to trace human migrations and the importance of sociolinguistics. Students should be able to discuss how language relates to socioeconomic class, gender, and nationalism and grasp the consequences of miscommunications and how globalization has increased the need for intercultural communication.
- After completing the cultural anthropology section of this course students should be familiar with how social organizations, political structures, economic systems and religious beliefs have varied through prehistory and from culture to culture. They will learn the significance of cross-cultural research and its contribution to

our knowledge of human nature. Students should also be able to understand the importance of holism and the dangers of studying cultural and societal phenomena without employing a holistic perspective.

- After completing the section on applied anthropology students should appreciate anthropology's potential to aid in solving contemporary problems facing humans today, including the plight of indigenous peoples, poverty, misuse of the environmental resources, and human rights violations. Students should also understand the basic issues involved in bioethics, bioprospecting, protecting indigenous knowledge, sustainable development, acculturation, and genetic engineering.

ANT 39 – Sexuality and Culture

- Students will learn about the study of sexuality, become acquainted with important researchers, and discuss problems associated with sexuality research. They will be introduced to current theories about the evolution of sexuality – Why sex? What is gender? What behaviors are part of our hominid heritage? They will learn about different reproductive strategies and the role of reproduction in sexuality. They should be able to identify essentialist perspectives and constructionist perspectives. In this section students will also learn about ways in which sexual behavior has changed over time and varies cross-culturally.
- Students will be introduced to psychosexual development, gender roles, and the history of love, and various forms and functions of marriage. They will also learn about physical variations in genitalia and political movements to accept people who do not conform to our binary system of sex/gender/sexuality.
- Students will be introduced to third genders in cultures around the world. They should be able to identify the difference between same-sex and same gender relationships. They will be able to think critically about the medicalization of sexuality and the problems associated with gender and sexual labels. They will learn about the history of gay rights, sex reassignment, ideas about sexual orientation, and about the unsuccessful attempts that have been tried to redirect sexual desire.
- Students will be introduced to a wide range of contemporary issues such as censorship and pornography, prostitution as a profession or a crime, sexual exploitation related to sex tourism, virginity testing and the many ways in which different cultures try to control sexuality. They will learn about cyversex and the future of sex with regards to medical advances and technology. The course will conclude with a section discussing sexual rights as human rights.

B – Psychology

PSY 11 – Introduction to Psychology

- Understand the basic concepts of scientific methodology and their relevance to psychological inquiry.

- Be aware that psychology is a discipline with many sub-fields or specialties both applied and research-based.
- Be acquainted with different mechanisms of learning, including conditioning processes, observational learning, and modeling.
- Have a basic understanding of the historical development of the various perspectives in psychology.
- Be sensitized to the ethical issues that attend the use of human and animal subjects in psychological research.
- Have an appreciation for the basic mechanisms that govern sensation and perception.
- Have an understanding of how psychologists have approached the study of consciousness, including such topics as circadian rhythms, sleep and dreaming, and the effects of drugs on brain and behavior.
- Understand the basic processes and functional structure of memory.
- Grasp the core issues surrounding human psychological development, including the importance of both heredity and environmental factors to biological maturation and psycho/social development.
- Have developed an appreciation for the relevance of motivation and drives to human behavior.
- Have been exposed to the many perspectives which have guided psychological theory and research on the topic of *personality*.
- Have an appreciation for the core issues that surround the topic of abnormal behavior and psychological disorder.
- Have been exposed to the various perspectives and methodologies of psychological therapy.
- Developed an appreciation for the influence of social groups and contexts on mental processes and behavior.

C- Sociology

SOC 31 – Introduction to Sociology

- Understand Sociology as a social science discipline with its own theoretical traditions and research methods.
- Define and apply basic sociological concepts used to analyze social structure and culture.
- Understand how social, cultural, political, and economic factors shape – and are shaped by – individual and collective behavior.
- Understand social stratification and its effects on social structure, culture, life chances, and the self.
- Interpret data in graphs, charts, and tables.

III – Biology

A – Biology

BIO 11 – Human Anatomy and Physiology I

- TISSUES, THE SKELETAL SYSTEM AND THE MUSCULAR SYSTEM
- Define the term “tissue” and list the four primary tissue types.
- Discuss the difference between simple and stratified tissue. Cite an example of a simple and stratified epithelial tissue.
- List the functions of the various cells found in connective tissue.
- Compare bone and cartilage in terms of generalized function, cell types, organizational structure and blood supply.
- Describe the microscopic structure of compact bone.
- Distinguish between the axial and appendicular skeleton and name the components of each.
- Identify the bones that make up the pectoral and pelvic girdles.
- Compare how flat and long bones develop.
- Explain why the axis and atlas are constructed the way they are.
- List and define the different types of fractures.
- Describe the distinguishing features of a synovial joint.
- Describe four different types of movements possible by synovial joints and give examples of each.
- Compare the structure of joints according to structure and range of movement.
- List the types of synarthroses and give an example of each.
- Describe the structure and control of the three different muscle types.
- Distinguish between the terms “origin” and “insertion” as these terms apply to muscles.
- Describe what is meant by the term “oxygen debt”.
- Diagram and label a neuromuscular junction.
- State the *“all-or-none” law* and explain how it relates to a single muscle fiber.
- Distinguish between antagonistic and synergistic muscles.
- Distinguish between isometric and isotonic contractions.
- Discuss the role of calcium and creatine in muscle contraction.
- Discuss how a nerve impulse travels between a motor neuron and the muscle fibers supplied by its axon branches.
- Identify four features that may be used to name a muscle.
- Describe the role that actin and myosin play in muscle contraction.
- Offer an explanation as to why smooth muscle is also referred to as visceral and involuntary muscle.
- Define what is meant by a motor unit and discuss its role in muscle contraction.
- NERVOUS AND ENDOCRINE SYSTEMS
- Distinguish between voluntary and involuntary control of the body.
- Describe, draw and label a picture of a typical neuron.
- List the primary organs of the nervous system.
- Describe the myelin sheath and relate its importance to a peripheral nerve.
- Describe the importance of myelin in peripheral nerve regeneration.

- Explain resting membrane potential and action potential of a neuron.
- Discuss the step-by-step mechanism of a nerve impulse from the point of initiation of the stimulus to the point of release of the neurotransmitter.
- Describe the neural pathways involved in a simple reflex.
- Explain the all-or-none principle as it is applied to a single neuron.
- Explain the differences, both functionally and structurally, between afferent (sensory), association (interneurons) and efferent (motor) neurons.
- Differentiate between the myelin sheath and the neurilemma.
- The term “receptor” has one meaning when used in reference to sensory neurons and another meaning when used in reference to postsynaptic neurons. Differentiate between these two meanings.
- Discuss the formation, circulation and function of cerebrospinal fluid.
- Offer an explanation of the fact that the medulla is sometimes referred to as the “vital reflex center of the body”.
- Define what is meant by the term, “localization of function” with reference to the cerebrum.
- List the major functions of the hypothalamus.
- Explain how stimulating the vagus nerve can cause the heart rate to slow or stop altogether.
- Distinguish between preganglionic and postganglionic fibers of the autonomic nervous system.
- Compare the locations of sympathetic and parasympathetic neuron cell bodies, dendrites and axons.
- Explain the mechanism of action that terminates the action of norepinephrine and acetylcholine.
- Compare the specific anatomical and physiological roles of the sympathetic and parasympathetic nervous systems.
- With reference to the human eye, describe the cavities of the eye and the nature of the fluids that fill these cavities.
- Compare the structure and function of rods and cones in the retina.
- Discuss the four processes that help to focus light on the retina and describe the most common errors of refraction.
- Trace the transmission of a sound wave from the tympanic membrane to the basilar membrane.
- Define cataract, glaucoma, myopia and hyperopia with reference to anatomical structure and function.
- Identify three different kinds of deafness.
- Describe the function of the hair cells of the inner ear as they relate to the sense of hearing as perceived by the brain.
- Briefly explain how concave glasses correct nearsighted vision.
- Explain the mechanism of taste discrimination and describe its neural pathway.
- Offer an explanation for the correlation between the sense of smell and taste.
- Identify the hormones of the posterior hypophysis (pituitary) by their name, target glad and clinical significance.
- Compare and contrast the general functions and mechanisms of action of the endocrine system and the nervous system.

- Distinguish between exocrine and endocrine glands.
- Describe the action of thyroxin on the basal metabolic rate.
- Discuss the possible clinical effects of overproduction of growth hormone.
- Relate the production of the adrenal medulla hormones to stressful situations.
- Differentiate between hypoglycemia and hyperglycemia in terms of insulin and glucagon and the level of sugar in the blood.
- Explain the relationship between the anterior lobe of the pituitary and the hypothalamus.
- Briefly describe the proposed mechanism of hormone action at the cellular level.
- Identify the various hormones produced by the different zona of the adrenal cortex and describe the pathological conditions that result from over and under secretion of these hormones.
- Explain the relationship between the hypothalamus and the posterior lobe of the pituitary.
- Discuss the structure and function of the parathyroid glands.
- Describe how hormone secretions are regulated by negative feedback processes. Describe a specific example.
- Compare the effects of hyposecretion and hypersecretion of thyroxin and identify the disease conditions associated with these malfunctions.
- Mention the two hormones, their source and mechanism of action that play an important role in regulating calcium levels in the blood.
- Describe the mechanisms that bring about increased secretion of epinephrine, ACTH, ADH and glucocorticoids during stress.
- DIGESTIVE SYSTEM
- List the regions of the digestive tract and the accessory organs of the digestive system and state the function of each organ/structure within the system.
- List the functions and major physiological processes of the digestive system.
- Distinguish between physical and chemical digestion.
- Describe the basic chemical process underlying all chemical digestion, and name the major substrates and products of this process.
- Describe the histology of the digestive tract; label a diagram of the major tissue layers.
- Describe the composition and functions of saliva.
- Explain the dental formula and differentiate clearly between deciduous and permanent teeth.
- Describe the composition of the gastric juice and name the cell types responsible for secreting its various components and indicate the importance of each component in stomach activity.
- State the role of bile and pancreatic juice in digestion.
- List the major function of the large intestine, and describe the regulation of defecation.
- Describe the three phases of gastric function and how gastric activity is activated and inhibited.
- List the enzymes involved in chemical digestion; name the foodstuffs on which they act and the end products of protein, fat, carbohydrate and nucleic acid digestion.

BIO 12 – Human Anatomy and Physiology II

UNIT I:

- CARDIOVASCULAR SYSTEM
- List four major functions of blood and the cardiovascular system.
- Define the formed elements, plasma, serum, hematocrit, and viscosity.
- Describe the functions of each of the formed elements of blood.
- Briefly describe the process of hemopoeisis (production of blood components).
- Identify each of the cellular components of blood from either a series of models or a blood smear.
- State the importance of a differential blood count.
- Explain the origin and action of erythropoietin.
- Describe the chemical composition of hemoglobin and its function in the red blood cell.
- Explain why a certain amount of iron is required in the diet and what role it plays in the hemoglobin molecule.
- Define and explain what is meant by polycythemia vera.
- Explain what is meant by anemia.
- Describe the following types of anemia and their possible causes: a- lack of exercise, b- blood loss, c- genetic (sickle cell anemia, thalassemia), d- iron deficiency, e- pernicious, f- aplastic.
- State the average life span of a red blood cell, and explain how damaged or aged erythrocytes are removed from the circulation.
- Describe the production and fate of bilirubin.
- List four main protein components of plasma and three of the smaller molecules most often found dissolved in plasma and the function of each.
- Describe the process of blood clotting, including both the extrinsic and intrinsic pathways.
- List the phases in blood clot formation and the function of each.
- Explain platelet plug formation and its significance.
- Explain the role of the liver, intestinal bacteria, vitamin K, clotting factors and calcium ions in the process of blood clot formation.
- Explain the homeostatic mechanisms of clot formation.
- List two anti-coagulants, and describe the importance of maintaining a balance between clot formation and anticoagulation.
- Describe how a clot functions in wound healing.
- Describe the inflammatory response and the role played by basophils and histamine.
- Define leukemia and leucopenia.
- Given a diagram of a human heart and/or a dissected sheep heart, be able to identify all of the major structures, chambers, valves, and blood vessels associated with the heart.
- Briefly describe the functions of each of the structures identified above.

- Trace the path of a drop of blood cell from the inferior vena cava to the descending aorta. LIST, IN ORDER, ALL OF THE BLOOD VESSELS, CHAMBERS OF THE HEART, AND VALVES IN THE PATHWAY.
- Explain the electrical events of the heart as they related to a normal electrocardiogram.
- Explain the meaning of the term cardiac cycle.
- Describe the rhythmicity of the heart, and how it can be altered by the autonomic nervous system and certain ions such as calcium, potassium, etc.
- Describe the heart sounds, and what produces them, as well as the meaning of a 'murmur'.
- With the use of a simple diagram or a chart, compare the structure and function of arteries, veins and capillaries.
- Explain the 'law of the heart'.
- Explain blood pressure.
- Briefly describe the procedure used to measure a patient's blood pressure.
- Explain the difference between systolic and diastolic pressure.
- Explain the changes in blood pressure as the distance from the heart increases.
- Explain the meaning of the term, pulse.
- Explain those mechanisms that aid in the return of venous blood to the heart; even though the blood pressure in the veins is virtually zero.
- List the major factors that affect blood pressure.
- Explain how each of the factors listed above can affect blood pressure.
- Describe several homeostatic mechanisms that maintain a constant blood pressure.
- Differentiate between atherosclerosis and arteriosclerosis and the implications of both in heart and vascular disease.
- Define thrombus, embolus, and aneurysm.
- Describe the factors involved in the movements of fluids across the capillaries.
- Describe the structure and function of lymphatic vessels and nodes.
- List and explain three main factors contributing to edema.

UNIT II

- RESPIRATORY SYSTEM
- List, in order, all of the structures of the respiratory tract/system.
- Describe the functions of each of the structures of the respiratory tract and system.
- Explain the difference between the respiratory tract and the respiratory system.
- Differentiate between external respiration, internal respiration, and cellular respiration.
- Describe the mechanism of breathing (inhalation, exhalation), and explain why expansion and contraction of the lungs is a passive process.
- Explain Boyle's Law, and its relationship to the process of breathing.
- Define the following: tidal volume, inspiratory reserve volume, expiratory reserve volume, vital capacity, residual volume, dead air space.
- Explain the partial pressure of a gas, and describe its role in the transport and exchange of CO2 and O2.

- List 4 factors that exert an effect on the control of breathing and explain how each factor affects the overall respiratory rate.
- Describe the Hering-Breuer reflex, and explain its role in the regulation of breathing.
- Explain the role of hemoglobin in the transport of O2, CO2, and CO.
- Describe the effect of change in blood pH on the affinity, binding, and separation of O2 and CO2 from hemoglobin.
- Describe the major forms of O2 and CO2 that the blood transports.
- Explain the mechanism of gaseous exchange (O2 and CO2), between the alveoli and the blood, and between the blood and the body tissues.
- Explain the chloride shift.
- Describe the processes of coughing and sneezing. Explain the importance of each of these reflexes.
- LYMPHATICS AND IMMUNITY
- Define immunity.
- Explain the meaning of the "immune system".
- Define the terms antigens, antibodies, agglutinins and agglutinogens.
- Explain what is meant by A, B, O and Rh blood typing, and why incompatibilities between certain blood types exist.
- Explain why the concepts of the 'universal donor' and 'universal recipient' are not really correct terms.
- Define B-lymphocytes, plasma cells, memory cells, gamma globulin, cellular immunity, and humoral immunity.
- Explain the role of t-lymphocytes, t-4 helper cells, cytotoxic cells, memory cells, suppressor cells, and the thymus gland in immunity.
- Contrast passive and active immunity.
- Define autoimmunity, allergy and complement.
- Explain the importance of the immune system.
- Define "AIDS", and explain why it is such a major health problem today.
- Describe three measures that can be taken to help prevent the spread of "AIDS".

UNIT III

- URINARY SYSTEM
- List in order, the major organs of the urinary system; state their location in the body, and the function of each.
- List three functions of the urinary system in addition to the removal of metabolic wastes from the blood.
- Label a diagram of the gross structures of the urinary system, as well as a detailed diagram of the organization of a nephron.
- Identify the major parts of the nephron and the function of each.
- List the major metabolic waste products found in urine.
- State where urea, one of the major metabolic wastes, is produced and describe its mechanism of synthesis.
- Describe the vascularization of the kidneys by tracing the path of a drop of blood from the descending aorta to the inferior vena cava.

- To demonstrate the pathway involved in urine formation, list, in order, all parts that a molecule of urea would pass through beginning in the descending aorta to the external environment.
- List and describe the three major processes involved in urine formation.
- Define the term, micturition and describe the control mechanisms that regulate it.
- Describe the homeostatic mechanisms involved in regulating urine formation and output. Be sure to discuss the role of ADH and aldosterone.
- Explain the effect of change in blood volume and pressure of glomerular filtration.
- List three abnormal components of urine, and state the possible implications of the presence of these substances in the urine.
- Describe the renin-angiotensin II mechanism and explain its importance.
- FLUIDS AND ELECTROLYTES
- Explain the importance of water in the body.
- Identify the major fluid compartments of the body and state the volume of fluid in each one.
- Compare and contrast intracellular fluid composition to extracellular fluid composition. Be sure to distinguish between the nature of the dissolved solutes and **amount** of solutes distributed in each compartment.
- Define or explain each of the following terms: blood hydrostatic pressure, sometimes also called blood fluid pressure, plasma colloid osmotic pressure, interstitial fluid hydrostatic pressure, tissue colloid osmotic pressure, effective glomerular filtration pressure.
- Describe the factors that tend to keep fluids within their respective body compartments.
- Describe the factors that tend to cause fluids to leave their respective body compartments.
- Explain the role of colloidal particles and plasma proteins in the movement of fluids between fluid compartments.
- Define the term, electrolyte, and describe their importance in the functioning of the body.
- List the major routes of fluid entry and exit from the body.
- List and describe the mechanisms that regulate fluid input and fluid output.
- Explain the importance of maintaining fluid and electrolyte balance within the body.
- Describe the mechanism for maintaining homeostasis of Na^+ and K^+ ions.
- Explain what would happen if there were a major increase in fluid input **without** a corresponding increase in fluid output.
- pH AND ACID BASE BALANCE
- Describe the properties of acids, bases and neutral salts.
- Explain the concept of pH.
- Explain the difference between a strong acid and a weak acid and between a strong base and a weak base.
- List three different sources of H^+ ions in the body.
- State the normal pH range of the blood, and explain why it is so important to maintain such a relatively constant pH in the blood.

- Describe the meaning of and function of a buffer system.
- Compare and contrast the role of buffer systems, the respiratory system and the urinary system in maintaining the pH of the body.
- Using the bicarbonate buffer system as an example, describe how a buffer system is able to resist a change in pH even though there may be a shift in H+ ion concentration.
- Explain the meaning of **respiratory** acidosis or alkalosis.
- Explain the meaning of **metabolic** acidosis or alkalosis.
- Describe how the body normally prevents the phenomena listed in the two objectives above from occurring.

UNIT IV

- REPRODUCTION
- Describe the general functions of the male and female reproductive systems.
- Given diagrams of both the male and female reproductive systems, identify the structures/organs of each system, including the accessory glands, and briefly state the function of each structure.
- Trace the pathway of a packet of sperm from its site of production in the male reproductive tract to the site of fertilization in the female reproductive tract.
- Given a cross section of the testis as seen with the microscope, identify and give the significance of each of the following structures: seminiferous tubules, germinal epithelium, interstitial tissue, spermatogonia, primary spermatocytes, secondary spermatocytes, spermatids, mature sperm/spermatozoa and Sertoli/sustentacular cells.
- Identify and give the function of each of the major structures seen in a microscopic view of the cross section of the penis.
- Given a microscopic view of a cross section of an ovary, identify the following structures: egg nests of primordial follicle, primary and secondary follicle, Graffian follicle and ovum, corpus luteum.
- List the primary and secondary sexual characteristics in both the male and female.
- List the gonadotrophic hormones produced by the anterior pituitary in the male and female and describe the functions of each one.
- Describe the negative feedback loops that exist between the anterior pituitary, the secondary sex hormones and the hypothalamus in both the female and the male.
- Explain the meaning of the term human menstrual/utero-ovarian cycle.
- Explain the relationships that exist between the rise and fall of FSH, LH, estrogen, and progesterone, and the events of the menstrual/utero-ovarian cycle.
- State when, during the menstrual/utero-ovarian cycle, fertilization can occur and describe the changes in the ovary and uterus if pregnancy does occur and if pregnancy does not occur.
- Define mitosis, meiosis and gametogenesis.
- Explain the significance of the process of mitosis, and describe the distinguishing events of each stage in the process.
- Explain mitosis as a part of the cell cycle.
- Prepare 2 tables, one to compare and the other to contrast the major features and events of mitosis and meiosis.

- Describe the processes of spermatogenesis and oogenesis and be sure to explain the role of meiosis in these processes.
- Explain the significance of reductional division in the process of gametogenesis.
- Using diagrams, show the differences that exist between the processes of spermatogenesis and oogenesis. **Explain** the significance of the differences between the two processes.
- Describe several alternative methods of birth control that can be used by the male or female.
- Explain the effectiveness of oral contraceptives based on their relationship to hormonal control of the female reproductive cycle.
- Explain the role of hormones during the process of parturition.
- DEVELOPMENT
- Explain the meaning of the term, embryonic development.
- Explain the difference between growth, morphogenesis and differentiation.
- Describe the phases of early development beginning with fertilization to the formation of the primary germ layers.
- List the primary germ layers, in order, from the outside of the embryo to the inside, and list at least two organ systems or major derivatives of each layer.
- Explain the difference between embryo and fetus.
- Briefly describe the processes involved in the formation of the extra embryonic membranes.
- Given a diagram of a developing embryo with its extra-embryonic membranes, label each membrane and describe the function of each.
- Explain the role of the umbilical cord in relation to that of the placenta in maintaining pregnancy.
- Describe the differences between the fetus and the adult in the structure of their hearts and some of the major blood vessels emerging from the heart.
- Describe 3 possible pathways of blood flow in the fetus and the necessary changes that must occur in the cardiovascular system at or shortly after birth.
- Trace the path of a molecule of oxygen from the umbilical vein in the fetus to the inferior vena cava in the mother.

BIO 13 – General Biology I

- Identification of 5 parts of the microscope from: Stage, Ocular lens, Objective lens, light source, iris diaphragm, condenser, coarse adjustment knob, fine adjustment knob.
- Ability to adjust the slide under 40x.
- Record observations.
- Graph construction, interpretation and analysis.

BIO 14 – General Biology II

- Complete PASCO exercise on thermoregulation.
- Complete PASCO exercise on transpiration.

- Complete report on a comparative description of two ecosystems (Plumb Beach and Fort Tilden), including the use of both living and abiotic factors.
- Evaluate organisms designed for the hypothetical Planet Project for their fitness to the planet created for that semester.

BIO 21 – Comparative Anatomy

- Know the parts of a microscope and their functions.
- Ability to focus a slide using 4x, 10x and 40x objectives
- Ability to use dissecting instruments.
- Use flow charts, cladograms and animal dissections.
- Explain evolutionary relationships based on the anatomical and physiological evidence.
- Study Museum of Natural History displays on chordate evolution and write answer to questions concerning evolutionary relationships.
- Ability to prepare written discussion on similarities and differences among various vertebrates based on known theories of phylogenetic relationships.

BIO 22 – Developmental Biology

- Ability to focus a slide under 4x, 10x, 40x and oil.
- Find specific structures on slide.
- Perform dissections on embryos using micro-instruments.
- Perform experiments on embryos and write lab report based on observations, using format of: introduction, material and methods, results and conclusions.
- Ability to explain differences and similarities of developmental processes based on evolutionary principles – written and oral work required.
- Use information from relevant scientific articles to write a term paper and to do an oral presentation.

BIO 33 – Introduction to Modern Concepts of Biology

- List the steps in the scientific method, and apply them to investigating a sample scientific problem.
- State the differences between science and technology.
- State why scientific knowledge and technology has assumed a position of enormous importance in modern society, and the role that citizens should try to follow concerning this knowledge and its applications.
- Identify the limitations that are imposed on science and scientists.
- List the characteristics of living things, and state why it is difficult to define life.
- Arrange in order, from smallest to largest, the levels of organization that occur in nature. Define each as you list it.
- Although organisms share many characteristics of life, different life forms present a great diversity of characteristics as well. Explain what is meant by the term diversity and discuss its significance.
- Identify major issues for the individual and the society that are considered bioethical.

- Cite biological facts that do not involve bioethical issues.
- Identify a single issue that you believe our society will be confronting in the twenty-first century and how the society could resolve it.
- Discuss the relationship between science and morality.
- Contrast the view of human responsibility for the stewardship of "life's continuity on earth", by Stephen Jay Gould with the belief that humans have a right to enjoy and use as much of the world's resources as they want.
- Describe Lamark's Theory of Acquired Characteristics and its significance to the study of evolution.
- Outline the Darwin - Wallace theory of evolution by natural selection.
- Define macroevolution and explain the value of fossil evidence.
- Define comparative morphology and distinguish between homologous and analogous structures; relate these terms to morphological divergence and morphological convergence.
- Describe the role of comparative biochemistry in establishing evolutionary relationships and cite examples.
- Outline the steps that could account for the origin of life from non-living matter and state what evidence exists to show that these steps occurred.
- Compare and contrast the early and current atmosphere.
- State how the earliest organisms changed their environments. How did this lead to the evolution of modern organisms?
- Describe the factors that affect population density, distribution, and dynamics.
- Explain the meanings of population curves on graphs that take the shape of J and S.
- Describe the difference between density-dependent and density-independent factors; give and explain examples of both.
- Indicate how the principles of ecology can influence human social, economic, and political considerations.
- Explain how the kinds of interactions among species can shape the structure of a biological community.
- Describe the human population explosion, its causes and probable fate.
- Describe the characteristics of a community.
- Define and distinguish between habitat and niche.
- List and distinguish among the several types of species interactions.
- State what an ecosystem is, list the essential and non-essential components that are usually present, and give the role of each.
- State the source of energy for most ecosystems.
- State the Laws of Energy and explain how it applies to ecosystems.
- State the word equations for photosynthesis and cellular respiration, and explain how these two processes are inter-related to each other.
- Diagram a simple food web and trace the flow of nutrients and energy through it; give the correct trophic level of each component of the ecosystem.
- State what is meant by the "productivity of an ecosystem" and list factors that limit productivity in particular types of communities.
- Explain what is meant by the statement, "Energy enters and leaves an ecosystem, whereas nutrients cycle within it."

- Diagram a simple nutrient cycle and label its major parts.
- State the differences between an oligotrophic and a eutrophic lake.
- Describe what happens when nutrients, pesticides or heat pollutes an oligotrophic lake.
- Describe to what extent, it is possible to "clean up" a polluted body of water.
- Describe the magnitude of pollution problems in the United States.
- Identify the principle air pollutants, their sources, their effects, and the possible methods for controlling each pollutant.
- Describe what acid rain does to an ecosystem. Contrast those effects with the action of CFC's.
- Examine the effects modern agriculture has wrought on desert, grassland, and tropical rain forest ecosystems.
- Describe the biological basis of the green revolution and explain its impact on human society, economics and ecology. Explain why the green revolution has been less successful in increasing food production than its proponents originally expected.
- Explain what is meant by the "Tragedy of the Commons" and why it makes environmental problems so difficult to solve.
- Describe how our fossil fuels and nuclear energy affects ecosystems.
- List the basic ideas of the cell theory.
- State the differences between prokaryote cells and eukaryote cells.
- Describe the structure of the cell membrane, and relate its structure to its ability to exchange substances with the cell's environment.
- Give the function(s) of each of the following structures: cell membrane, nucleus, nuclear membrane, ribosome, mitochondrion, cell wall, chloroplast, vacuole, lysosome, endoplasmic reticulum, Golgi complex, cilium, flagellum.
- List three features that would enable you to tell the differences between a plant and an animal cell.
- Explain the significance of cell division as it relates to reproduction.
- Describe the general functions of both mitosis and meiosis in eukaryotic life.
- Define chromosome in terms of chemical construction and the different physical forms during cell divisions.
- Describe, in terms of chromosome number, how mitosis and meiosis maintain a constant chromosome number in the life cycle of a particular species.
- Explain what is meant by cell cycle and be able to visualize where mitosis fits into the cell cycle.
- Describe each phase of mitosis.
- Relate the concept of homologous chromosomes to the haploid and diploid chromosome numbers; explain why gametes must be haploid and a zygote diploid.
- State the differences between asexual and sexual reproduction and discuss the advantages and disadvantages of each.
- Give some reasons for Mendel's success in arriving at the laws governing the inheritance of genetic characteristics where others had failed.
- Define and compare the terms phenotype and genotype and their relationship to the terms dominant and recessive.

- Use a Punnett square to illustrate a monohybrid cross and an independently assorting dihybrid cross, and work out the genotypic and phenotypic ratios expected from such crosses.
- State Mendel's laws of segregation and independent assortment.
- Solve the genetics problems at the end of chapter 3 in your textbook.
- Define sex chromosomes and autosomes; then distinguish the types of alleles found on each.
- Define karyotype; state why it is useful; describe how karyotyping is done.
- Describe the characteristics of X-linked inheritance; summarize the characteristics of hemophilia A as an example.
- Describe how changes in chromosome number and structure affect inheritance.
- Indicate the benefits of genetic screening and genetic counseling to society.
- Describe the function and structure of DNA.
- Describe the structure and function of messenger-RNA,transfer-RNA, and ribosomal- RNA.
- State briefly the techniques used in recombinant DNA, and give an example of a practical application of this technology.
- Describe how variations occur in populations.
- List the conditions of stability that must be met before genetic equilibrium is possible.
- List and define the major forces of microevolution.
- Describe four kinds of selection mechanisms that help shape populations.
- Define natural selection and use the term differential selection in the definition.
- Define speciation and explain the role of divergence and isolation in that process.

BIO 37 – Human Genetics

- Understand the historical and current (modern) applications and approaches used in the field of human genetics.
- Understand how genetic studies and practices include ethical, legal and social issues.
- Understand that cells are the fundamental unit of living organisms, and be able to describe how each cellular component functions.
- Be able to describe mitotic and meiotic cell division, and explain the purpose of each type.
- Be able to describe which parts of the human reproductive system are involved in sex determination and development.
- Know the sequence of sex determination from conception to determination of genetic sex, then gonadal sex, then phenotypic sex.
- Understand and describe dosage compensation, and the difference between sex-influenced and sex-limited inheritance.
- Be able to quantitatively and qualitatively describe the characteristic human chromosomal complement.
- Identify and differentiate between normal and abnormal karyotypes and describe the condition to which they correspond.

- Be able to describe several human syndromes based on the karyotype provided.
- Be able to describe various assisted reproductive technologies utilized as childbearing options.
- Understand how gene therapy can help individuals afflicted with certain genetic diseases.
- Know and distinguish the relationship between DNA, chromatin and a chromosome.
- Recognize and identify parts of the DNA double helix.
- Deduce proper results of DNA replication when given an example segment.
- Describe how the information encoded in DNA specifies protein products.
- Be able to trace the flow of genetic information from the DNA in the nucleus to the protein product in the cytoplasm.
- Distinguish between transcription and translation, and describe similarities and differences.
- Explain the steps entailed for final protein product formation.
- Using phenylketonuria as an example, describe how an enzyme mutation disrupts metabolic pathways, and causes disease.
- Give examples of other enzyme mutations disrupt metabolism.
- Explain how the mutant hemoglobin in sickle cell anemia occurs, and disrupts many body processes.
- Be able to explain why cancer is considered a genetic disease.
- List the steps that occur manifesting in cancer, from a single mutated cell to the disease.
- Describe the mutations and steps in colon cancer.
- Describe several common genetic changes which occur in cancer cells.
- Describe how many basic genetic concepts we know about genetics was first identified in pea plants.
- Explain how Gregor Mendel’s experiments explain the separation and assortment of genes (alleles).
- Relate meiosis to Gregor Mendel’s experimental results.
- Provide a few examples of exceptions to Gregor Mendel’s laws.
- Know how to interpret and design a pedigree.
- Be able to distinguish between autosomal dominant, autosomal recessive, and sex-linked dominant and recessive traits.
- Explain holandric and maternal inheritance, illustrating with an example for each.
- Explain how most human traits are controlled by more than one gene. Give several examples.
- Distinguish between polygenic and multifactorial traits.
- Relate gene expression to environmental influence.

BIO 39 – The Biology of Aging

- To present the major concepts that define the scientific study of aging.
- To promote awareness in students of their body's physical transitions through life's stages.

- To increase student understanding of nutrient, hormone and drug effects on the aging human body.
- To involve students in the study of current aging research efforts.
- To help students evaluate aging-related advertisements and to better understand human and media fascination with concepts of immortality.

BIO 50 – General Microbiology

- Complete Bioremediation experiment – Students report their recorded results and respond to questions based on their experimental conclusions.
- Complete Winogradsky Column project – Students will prepare a Winogradsky column and record changes in the column over a 6 week period. An analysis of the changes occurring due to microbial succession will be recorded and reported as drawings and a written explanation.
- Complete Unknown Identification experiment – Students will perform a series of biochemical tests to identify an unknown bacterium.
- Complete collection of water and sediment samples; isolation of algae and antibiotic-producing actinomycetes – Students will collect a marine water and sediment on a field trip. Samples are used to cultivate microalgae and isolate actinomycetes.

BIO 51 – Microbiology in Health and Disease

- Apply the concept of asepsis and its applications to laboratory procedures, hospitals, and medical practices.
- Employ basic principles of microbial anatomy and physiology to microbial virulence, pathogenicity, and disease establishment.
- Identify the factors affecting microbial virulence and the responses by the host's defense mechanisms.
- Determine properties of microorganisms through staining and biochemical testing that can be used for diagnostic microbial identification.
- Recognize the signs and symptoms of particular disease and decisions involved in determining antibiotic therapy.

BIO 52 – Marine Biology

- Understand the working of marine systems.
- Observe and get to know the intertidal marine organisms.
- Understand the ecology of the intertidal environment.
- Understand various marine environments.
- Understanding of human impact on marine environments.

BIO 53 – Ecology

- Understand the interrelationship between plants, animals and humans on the planet.
- Be able to identify plants of the New York region.
- Understanding the local ecosystems.
- Statistically analyze populations, species diversity of the plants in the various ecosystems.
- Soil analysis of each area visited.
- Understanding of human impact on the environment.

BIO 54 – Botany

Competency in using laboratory equipment.

- Proper sterilization of embryo.
- Aseptic handling of embryo.
- Propagation of embryonic tissue.

Writing a laboratory report.

- Correctly placing seeds into planting medium
- Taking periodic measurements of materials.
- Watering plants.
- Correct presentation of data in a table and/or graph.
- Analysis of data collected to reach a conclusion of project.

Reading a scientific journal article.

- Ability to present salient points of paper.
- Demonstrating comprehension of terms utilized.
- Writing a short paragraph or short examination essay relevant to the article or review.
- Opinion and/or analysis of experimentation or review in writing.

Problem solving.

- Proper filling and preparation of filtration columns.
- Correct layering of components.
- Successful filtration of different growth media.
- Collection of filtrate.
- Microbial content analysis of media on agar media plates.

BIO 55 – Biology of invertebrates

- Report on one living organism.
- Behavior study of annelids.
- Internet project – student project supplies three internet addresses and summarizes information sheet for each organism studied from each phylum studied in class.

BIO 59 – Genetics

Competency using laboratory equipment.

- Proper pouring of agarose and comb placement.
- Loading DNA samples, which includes use of micropipetter.
- Proper handling of agarose gel after completion of electrophoresis.
- Visualization of bands – staining and destaining techniques.
- Correctly determining paternity, criminal or pedigree (including risk of disease).

Reading a scientific journal article.

- Ability to present salient points of paper.
- Demonstrating comprehension of terms utilized.
- Writing a short paragraph or short examination essay relevant to the article or review.
- Opinion and/or analysis of experimentation or review in writing.

Problem Solving

- Cutting metaphase plate photograph.
- Correctly cutting individual chromosomes in photograph that distinguish meta-, submeta-, acro- and telocentric types.
- Cutting the correct number of chromosomes from photograph.
- Correctly pairing homologous chromosomes.
- Proper positioning of chromosomes (p arm on top and q arm down).
- Correct identification of photograph with respect to gender, type of disorder, etc.

Use resources to collect information

- Accessing the Human Genome website.
- Accessing the instructed gene sequence.
- Comparison of instructed sequence with database sequence.
- Identifying the differences and/or similarities, as instructed, between the two sequences.
- Postulating what differences may cause relating to protein products, or postulating similarities between related organisms sequences.

BIO 70 – The Science of Nutrition

- Develop the knowledge to select a diet healthy for now and for one's lifetime.
- Apply the scientific method to investigate nutritional issues and evaluate food labels and claims.
- Analyze the interactions of nutrients in the framework of the body's metabolic patterns.
- To involve students in the study of current nutritional research efforts.
- Analyze the influence of marketing forces on foods and supplements regarding consumer purchases.

IV – Business

A – Accounting

ACC 11 – Fundamentals of Accounting I

- Understand the fundamental concepts and techniques to account for business transactions.
- Learn the accounting cycle for both a service business and a merchandising concern.
- Prepare and interpret basic financial statements.

ACC 12 – Fundamentals of Accounting II

- Estimate and account for bad debts and promissory notes.
- Properly account for short and long-term liabilities.
- Apply Generally Accepted Accounting Principles to corporations.
- Prepare, analyze and interpret financial statements of a corporation.
- Apply financial information to managerial decision-making.

ACC 21 – Intermediate Accounting I

- Identify the objectives of Financial Reporting.
- Identify the need for accounting standards and the standard setting bodies.
- Explain the meaning of GAAP and the basic principles of accounting.
- Define the basic elements of financial statements.
- Identify the qualitative characteristics of financial information.
- Describe the steps in the accounting cycle.
- Prepare journal, adjusting, closing and reversing entries.
- Prepare a classified Balance Sheet with appropriate disclosures.
- Prepare an Income Statement, Retained Earning Statement, Statement of Stockholder's Equity and Statement of Cash Flows.
- Explain the reporting of irregular items on the Income Statement.
- Explain reporting of Other Comprehensive Income.
- Calculate and report earnings per share.
- Apply the Revenue Recognition Principle.

ACC 22 – Intermediate Accounting II

- Apply GAAP to Cash, Accounts and Notes Receivable.
- Identify the basic issues related to accounting and reporting for the cost of inventory.
- List the basic conceptual and reporting issues related to intangible assets.
- Illustrate the accounting issues related to liabilities.
- Outline the various accounting issues and transactions related to stockholder's equity.

- Outline accounting for debt and equity investments.
- Describe the concept of time value of money.
- Review the reporting requirements for accounting changes.

ACC 60 – Introduction to Computer Concepts

- Identify and define the terminology used in computerized accounting systems.
- Record transactions in the accounting cycle including purchases, sales, payments and receipts using accounting software.
- Perform typical accounting tasks for a small to medium business including adjusting entries, closing procedures, bank reconciliation and inventory adjustments using software.
- Perform payroll tasks including preparation of payroll checks and quarterly tax returns using program.
- Convert a company's manual accounting system into a computerized system.

B – Business

BA 11 – Fundamentals of Business

- Differentiate between the different forms of business ownership and describe the advantages / disadvantages of each.
- Recognize the difference between ethical and unethical behavior.
- Locate specific companies on newspaper stock indexes, and determine price per share, change in price and 52 week hi / lo.
- Discuss the concepts of supply and demand, importing and exporting, and trade deficit vs surplus.
- Locate specific information about a corporation.
- Demonstrate ability to read and interpret a basic organization chart.
- Read, evaluate and discuss a current business article.
- Restate the indicators used to measure a nation's economy.
- Define the difference between checking, savings and time-deposit accounts.
- Discuss the differences between various world economies.

BA 12 – Business Law

Students will demonstrate understanding of:

- The operation of the Court Systems and their procedures
- The involuntary civil obligations in all third-party relationships (The Law of Torts)
- The obligations voluntarily undertaken by a businessman in relationships with customers, suppliers, employees and the general public (The Law of Contracts).

BA 14 – Principles of Marketing

- Define marketing and describe how it creates four marketing utilities.
- Explain what markets are and how they are classified.
- Identify the four elements of the marketing mix and explain their importance in developing a marketing strategy.
- Explain how the marketing environment affects strategic marketing planning.
- Identify the major components of a marketing plan.
- Identify factors that may influence buying behavior.
- Explain what a product is and how products are classified.
- Explain the product life cycle and discuss how it leads to new product development.
- Explain the uses and importance of branding, packaging and labeling.

BA 33 – Business Communications

- Explain how nonverbal signals can affect the success of business communications.
- Recognize and restate how cultural differences can affect the success of business communications.
- Describe and define the barriers to successful communication.
- Demonstrate ability to produce a properly formatted business letter.
- Demonstrate ability to create and deliver purposeful oral presentations.
- Demonstrate ability to format and write an effective resume.

BA 60 – Introduction to Computer Concepts

- Know the terminology of modern computer systems and their effects on business with the stress on microcomputer applications.
- Be able to operate an IBM-compatible microcomputer, Windows operating system, and the Microsoft Office "suite" including Word, Excel, PowerPoint and Access, as well as an Internet browser.
- Further individual interests and understanding of computers for personal and career use.

BA 77 – Business Images in the Media

- Identify the types of ethical concerns and social responsibilities that arise in the business world.
- Describe the negotiating process involved in labor-management disputes.
- Identify leadership styles as portrayed by the films' leading characters.
- Identify key management functions such as goal setting and planning, organizing, leading, motivating and controlling as depicted in the selected films.
- Explain the major components of human resource management as well as the challenges of cultural diversity in the workplace.

- Describe the nature of a small business and the reasons that some succeed while others fail.
- Explain and describe the elements of entrepreneurship as characterized by the film protagonists.

BA 81 – Managerial Decision Making

- Identify the steps necessary to complete a business project.
- Explain how a selected topic impacts the current and future success of companies.
- Describe three ways in which a selected topic impacts any selected industry.
- Identify four effects of the selected topic on the local economy.
- Discuss the challenges created by the selected topic on American business.
- Outline five measures taken by companies to resolve the challenges posed by the topic analyzed.

C – Economics

ECO 12 (1) – Macroeconomics

- Describe the fundamental concepts and theories of various economic terminology and principles.
- Identify and explain the various macroeconomic variables that affect our economy today.
- Relate economic concepts to current events.

ECO 12 (2) – Macroeconomics

- Acquire the training and ability to do research on current significant macroeconomic issues.
- Have a basic understanding of how the overall performance of the American economy is measured.
- Develop skills and expertise in the analysis of graphical and diagrammatical illustrations.
- Be able to analyze and evaluate the economic and foreign policies of the Federal Government and their impact on the U.S. economy.
- Acquire a comprehensive knowledge of the American Banking System and its impact on the American economy.

ECO 14 – Money and Banking

- Gain a comprehensive knowledge of the nature, structure, and functions of the American Banking System.
- Develop skills and expertise in the analysis of graphical and diagrammatical illustrations.

- Acquire training and ability to do research on current significant macroeconomic issues.
- Be able to understand how depository institutions are supervised and examined by the regulatory agencies.
- Develop a basic understanding of the impact of the Federal Reserve Banks on the U.S. economy.
- Be able to analyze and evaluate the impact of the Federal Government's economic and foreign policies on the American economy.

D – Office Administration and Technology

ADM 15 – Gregg Shorthand (Elementary)

- To acquire mastery of Gregg Shorthand theory, brief forms, and phrases.
- To demonstrate the ability to take office-style dictation of short business letters and to transcribe the dictation within the prescribed error limitations.
- To introduce students to the integration of spelling, punctuation, and correct English usage skills in the transcription process.

E – Retail and Fashion Merchandising

RM 31 – Retail Management

- To differentiate between the various types of retail enterprises and to know the laws and governmental activities that affect it.
- To recognize the interrelationships of the retail store divisions.
- The demonstrate a knowledge of the duties and responsibilities of retail management divisions and their functions: buying and selling, store management, finance, control and computer operations.
- To know the many career opportunities in retailing.
- To solve retail strategy problems and to enhance retail strategy opportunities by studying real world retail strategy developments in current media outlets.

RM 33 – Salesmanship

- To provide students with experience which will help them explore selling as a career.
- To bring about personality improvement by providing techniques and activities leading to personality growth and the development of proper work attitudes on the part of students.
- To analyze the customer's needs and wants to enable the salesperson to help the customer to buy more wisely.
- To train students in the basic principles of selling so that students may lay the foundation for becoming expert sales consultants.
- To develop more effective salespeople to meet the needs of business.
- To help the student solve problems in human relationships.

- To prepare students to successfully deal with people in the business world.

RM 34 – Merchandise and Control

- Understanding the dynamics of retailing and merchandising goods for profit.
- The study of contemporary merchandising and management problems. Learning to analyze and solve these problems through practical applications.
- Familiarize the students with the principles and procedures of profitable manipulation of a merchandise investment. This includes planning, pricing and inventory control with emphasis on the mathematics that produce a profit for the retailer.
- To help the student become proficient in the mathematics involved in the study of merchandising using illustrations, explanations and exercise for homework followed by discussion and review of them in class.
- To acquaint the students with the many career opportunities available in retail buying, merchandising and management.
- To equip the student with the knowledge necessary to prepare a six-month merchandising plan for a department store.

FM 35 – Textiles and Non-Textiles Analysis

- Students will be exposed to an overview and specific knowledge needed in the textile and non-textile fields.
- Be able to explore textile fields as a career choice.
- Be able to understand how to analyze customer needs and wants, and how to aid the customer in making wise choices.
- Understand the textile industry and how it differs from the non-textile industry.

FM 37 – Fashion Merchandising

- To know the process of identifying trends in both the women's and men's apparel markets.
- To demonstrate a knowledge of the recognized designers and their contributions to the industry.
- To demonstrate the important elements of design of designers, both historical and emerging.
- To know that many career opportunities in fashion merchandising.

RM 92 – Field Experience

- To learn to recognize how to develop the behavior, skills and competencies expected to enter the work world and practice them in a real-world internship or part time position in the retail merchandising industries.
- To analyze current retailing, marketing and fashion merchandising problems and trends.

- To understand and differentiate between the employee-employee, employer-employee and employee-customer relationships, and the human relationships in work situations.

V – Communications and Performing Arts Department

A – Mass Communications

MCB 34 – Broadcast Advertising

Upon successful completion of this course, students will be able to:
- Understand ratings and their analysis.
- Differentiate between good and poor copywriting.
- Understand more about media buying and planning.
- Understand the internal flow and control of advertising agencies and broadcast stations.
- Recognize commercial production techniques.
- Know the legal and ethical responsibilities in advertising.

MCB 35 – Introduction to Broadcasting

Upon successful completion of this course, students will be able to:
- Students should know the history and contemporary status of radio and television, including popular music and emergent communication technologies.
- Students must sense the structure of electronic media operations and of media-related industries.
- Students should be able to discuss the various social and psychological issues that are associated with the process of broadcast communication.

MCB 39 – Studio Operations

Upon successful completion of this course, students will be able to:
- To develop technical skills in recording, editing and mixing.
- To develop an understanding of what makes good audio production.
- To develop a creative thought process.

MCM 30 – Mass Media

- Students will be able to define Communication, Mass Communication, Culture, Mass Communication and Culture.
- Students will be able to explain in writing the scope and nature of Mass Media and how the role of Technology and Money interact with media.
- Students will be able to explain the current trends in Mass communication.

MCM 30 – Mass Media II

Upon the successful completion of this course, students will be able to:

- Understand the evolution of the various media and, through that, to grasp the social implications of such changes.
- Understand the current method of operations of the various media and how changes in these functions lead to new "languages" of message transmission.
- Assess the role of mass communication in society.
- Distinguish how changes in media functions lead to new "languages" of message transmission.
- Assess the qualitative and sometimes quantitative effects of the mass media on our sociological, psychological and cultural activities.
- Evaluate the process and level of investigation in various media.
- React in a cogent way to "thought" pieces.

B – Speech

SPE 11 – Listening and Speaking Skills

Upon successful completion of this course, students will be able to:

- Understand and use advanced academic vocabulary.
- Pronounce multisyllabic words with correct stress patterns.
- Use a dictionary skillfully, including identifying context-appropriate definitions, correct pronunciation, and stress patterns.
- Listen critically and carefully, especially in academic contexts.
- Take notes in an organized way to reflect main ideas and details of a lecture.
- Give individual and/or group presentations that are clear and organized.
- Use standard English grammar in speaking and writing.

SPE 21 – Effective Public Speaking

- Students will prepare and deliver informative and persuasive speeches using an extemporaneous delivery style.
- Students will prepare a formal full-sentence preparation outline with references for the informative and persuasive speeches presented.
- Students will evaluate the presentations of their fellow students and provide feedback through written and oral critiques.
- Students will prepare and deliver short informal impromptu speeches.

- Students will demonstrate their understanding of speech communication concepts by using the vocabulary of the discipline in class discussions.
- Students will demonstrate mastery of key terms and concepts on quizzes and the final examination.

SPE 22 – The Art of Conviction and Persuasion

Upon successful completion of this course, students will be able to:

- Understand the role of persuasion in today's society.
- Analyze written and oral arguments.
- Construct persuasive arguments using evidence and reasoning.
- Understand and apply the principles of effective delivery of persuasive arguments.

SPE 23 – Pronunciation Skills for ESL Students

Upon successful completion of this course, students will be able to:

- Improve their production of English consonant and vowel sounds.
- Speak with better oral fluency.
- Hear phonemes more accurately and distinguish between similar phonemes.
- Improve general comprehension.
- Be familiar with the International Phonetic Alphabet (IPA).
- Recognize the International Phonetic Alphabet symbols for phonemes.
- Understand and describe the way phonemes are made with the speech organs and vocal cords.
- Give informal oral presentations.
- Understand sound-spelling correspondence and learn spelling rules.

SPE 24 – Career Communications

Upon successful completion of this course, students will be able to:

- Understand the importance of communication in the organization.
- Analyze their own listening habits and develop strategies to improve them.
- Participate successfully in mock job interviews.
- Understand the principles of group decision-making.
- Participate in group problem-solving meeting.
- Understand the elements of informative and persuasive presentations.
- Conduct an outside interview with a member of an organization.
- Deliver oral reports and impromptu speeches.
- Design and deliver a formal presentation with visual aids.
- Understand the role that nonverbal communication plays in the communication process.

SPE 25 – Small Group Communication

Upon successful completion of this course, students will be able to:

- Understand substance, purpose and form appropriate for discussions.
- Alternate creative and logical thinking as groups and situations demand.
- Respond sensitively to membership and leadership responsibilities.
- Understand the significance of the discussion method in a democratic society.
- Understand the literature in the field.
- Identify and achieve a purpose appropriate to a given situation and group of people.
- Understand group-centered and audience-centered discussion forms.
- Listen actively.
- Interact freely.
- Maintain an inquiring attitude.
- Promote positive human relationships.
- Think creatively by applying principles of suspended judgment and multiple alternatives.
- Apply ethical principles in dealing with others' thoughts and feelings.
- Resolve problems through group discussion.

SPE 27 – Oral Interpretation

Upon successful completion of this course, students will be able to:

- Understand the importance of oral interpretation both as an art form and as a practical skill useful in many professions.
- Analyze a work of literature to determine the author's point of view and intentions.
- Analyze an audience in order to determine the particular demands that they may make upon the reader.
- Effectively use both body and voice in oral interpretation.
- Understand the particular requirements and demands of prose, drama, and poetry for the reader.

SPE 28 – Communication Skills for ESL Students

Upon successful completion of this course, students will be able to:

- Speak English more fluently.
- Identify and correctly produce problematic phonemes and stress patterns.
- Understand and speak with blending and contractions.
- Comprehend and use an expanded vocabulary, including idioms, within the context of complex sentence structure and in extended formal and informal discourse.
- Give informal presentations.

- Use the dictionary competently.
- Take organized notes of lectures.
- Improve basic grammar use.

SPE 29 – Voice and Articulation

Upon successful completion of this course, students will be able to:

- Develop breathing techniques which support effective voice and volume.
- Identify and utilize the components of effective vocal expressiveness such as rate, pausing, stress, emphasis, and inflection.
- Classify American English vowels, diphthongs, and consonants.
- Transcribe words and sentences from phonetic or dictionary symbols to conventional spelling and vice-versa.
- Discriminate between standard and non-standard production of American English vowels, diphthongs, and consonants.
- Monitor and correct one's own speech patterns.
- Produce standard American English vowels, diphthongs, and consonants in isolation, words, and connected speech.
- Become better familiar with the International Phonetic Alphabet.

SPE 40 – Phonetics

Upon successful completion of this course, students will be able to:

- Accurately transcribe isolated words and connected adult speech.
- Transcribe disordered speech.
- Identify American English phonemes using the International Phonetic Alphabet.
- Describe the place and manner of articulation of American English phonemes.
- Recognize, label, and describe the major parts of the articulatory system.
- Understand and apply the articulatory and acoustic categories of sounds.
- Recognize and label the processes that occur in conversational speech.
- Recognize and label the processes that occur in disordered speech.
- Use diacritics to give more detailed transcriptions based on slight differences in phoneme production.
- Understand the differences between adult speech, child speech, and disordered speech.

SPE 41 – Language Development

Upon the successful completion of this course, students will be able to:

- Define language and language related behavior.
- Understand theories of language development.
- Understand the normal sequence of language development.

- Understand how normal development is used as a tool for understanding delayed, disordered, and culturally different patterns of language.
- Evaluate a child's language development.

C – Music

MUS 21 – Introduction to Jazz

Upon successful completion of this course, students will be able to:

- Recognize Jazz in each of its major periods.
- Recognize distinguishing compositional traits of composers from each period.
- Study and recognize non-mainstream composers, musicians and works from each period (e.g. Women, Europeans, etc…)
- Be able to research historical information and determine relevance to the music of each period.
- Study and recognize the effect technology and societal changes had in publishing, transportation, media, etc.
- Recognize relevant world events during Jazz's historical timeline from an interdisciplinary view (e.g. History, Politics, Law, Religion, Media, Mathematics, etc…)

MUS 27 – Music of the World's People

Upon successful completion of this course, students will be able to:

- Provide a familiarity with a varied body of folk and ethnic music.
- Provide insight into various cultures and nations through their folk music.
- Provide the aural ability to distinguish among music from many nations.

MUS 30 – Rudiments of Theory

- To develop students' knowledge of the basic theoretical rules which are applied in music.
- To introduce students to the basic pitch and rhythm combinations.
- To develop students' ability of understanding music.

MUS 31 – The Musical Experience

Upon successful completion of this course, students will be able to:

- Recognize the basic elements of music including pitch, rhythm, meter, harmony, structure and form.

- Differentiate works of Western classical music of the Medieval and Renaissance, Baroque, Classical, Romantic and contemporary periods.
- Develop analytical and critical thinking skills through the use of guided listening activities.
- Demonstrate oral and written recognition of varied music.

MUS 48 – Music Theory / Ear Training

Upon successful completion of this course, students will be able to:

- Understand how theory is applied to making music.
- Demonstrate knowledge of harmony and arranging.
- Hear melodies and identify rhythms.

D – Performance

PER 20 – The Business of Show Business

Upon successful completion of this course, students will be able to:

- Ascertain the basic elements of contracts used in the performing arts.
- Understand the function of agents and managers in the performing arts.
- Identify the different types of theater and how they are affected by unions.
- Effectively communicate thoughts and ideas to others.
- Research supporting services to find jobs in the field.
- Analyze the function of the production staff on an entertainment project.
- Critically evaluate the business of theater.
- Develop a sense of the field of broadcasting.
- Apply ethical principles in contractual relations.
- Develop an awareness of music publication and record deals.
- Recognize the impact of business on the entry level performer.
- Determine the needs of taking entertainment on tour.
- Deliver an effective oral presentation of analysis.
- Cite sources using MLA style of documentation.

PER 46 – Training the Performing Voice

Upon successful completion of this course, students will be able to:

- Perform a musical or spoken piece with an examination of all related performance matters.
- Demonstrate the fundamentals of vocal registration and resonance through the practical application of specific vowel exercises along with emphasis on performer’s diction through consonant articulation.
- Apply the practical elements of good posture and breath support.

PER 59 – The Performing Arts Experience

Upon successful completion of this course, students will be able to:

- Grasp the various components that are required to make any performance successful.
- Develop problem solving techniques for the difficulties of live performance.
- Collaborate.
- Contribute to a group performance.
- Evaluate several types of performance.
- Relate performance to the particular cultures and styles studied.
- Effectively communicate thoughts and ideas to others.
- Critically evaluate the elements of live performance.
- Develop a sense of live performance as a cultural force.
- Deliver an effective oral presentation of analysis.
- Cite sources using MLA style of documentation.

E – Theater Arts

THA 52 – Beginning Acting

Upon successful completion of this course, students will be able to:

- Understand the basics of the art of acting.
- Outline the structure of a monologue.
- Develop an artistic awareness of the work and craft of acting.
- Structure a physical and vocal warm up routine.
- Effectively communicate thoughts and ideas to others.
- Research historical periods to find background information for a monologue or scene.
- Analyze the needs and attitudes of a specific character.
- Perform a monologue.
- Critique another performer’s work.
- Identify various approaches for creating a character.
- Determine textual clues to performance needs.

THA 53 – Modern Scene Study

Upon successful completion of this course, students will be able to:

- Analyze the steps necessary for creating a role.
- Use various theories of acing in performance.
- Investigate the physical and emotional abilities for acting.
- Create a believable character.
- Write a character analysis.

- Develop a stronger artistic awareness of the work and craft of acting.
- Structure a physical and vocal warm up routine.
- Effectively communicate thoughts and ideas to others.
- Research historical periods to find background information for a monologue or scene.
- Analyze the needs and attitudes of a specific character.
- Perform a scene.
- Critique another performer's work.
- Identify various approaches for creating a character.
- Determine textual clues to performance needs.

THA 55 – Stage Craft

Upon successful completion of this course, students will be able to:

- Function as productive members of a carpentry or load-in crew.
- Adhere to standard safety procedures backstage and in the workshop.
- Accurately measure and mark out lumber.
- Comprehend and translate design and working drawings creating cut lists and material lists from them.
- Identify and choose different types of lumber and plywood toward various tasks.
- Construct standard scenic elements such as flats, platforms, and steps.
- Prepare the above scenic elements by finishing, filling seams, sanding surfaces, and/or covering with fabric.
- Show familiarity with various types of soft goods used as scenic elements.
- Demonstrate safe rigging practices and basic knots.

THA 56 – Basic Lighting

Upon successful completion of this course, students will be able to:

- Understand the fundamental physical properties of electricity and light.
- Identify and use in context the basic vocabulary of stage lighting.
- Hang, focus, troubleshoot, and strike lighting equipment safely and efficiently.
- Apply and relate electrical theory to stage application.
- Understand the paper work and basic process of a lighting designer.
- Operate basic console operations, programming, and dimming technology.
- Use the industry standard program, *Lightwright.*
- Demonstrate how stage lighting contributes to a play.

THA 62 – Classical Acting Styles

Upon successful completion of this course, students will be able to:

- Understand pre-modern drama and its linguistic demands on the actor.
- Research historical periods and study their effect on behavior.

- Explore the performance requirements for each historical era studied.
- Compare modern acting style to classical acting style.
- Write a character analysis.
- Effectively communicate thoughts and ideas to others.
- Analyze the attitudes of historical periods.
- Perform a scene.
- Critique another performer's work.
- Identify various approaches for creating a character.
- Determine textual clues to performance needs.

THA 66 – Directing: The Fundamentals

Upon the successful completion of this course, students will be able to:

- Understand the role of a director.
- Select, cast, rehearse and direct a 10 minute play.
- Research historical periods and study their effect on behavior and performance.
- Explore the performance requirements for a play.
- Communicate detailed instructions to others.
- Compile a director's book.
- Effectively communicate thoughts and ideas to others.
- Analyze a play for performance.
- Critique another director's work.
- Conceptualize a production.

THA 67 – American Musical Theater

Upon successful completion of this course, students will be able to:

- Develop an appreciation of the musical theater form.
- Understand the elements composing "musicals".
- Determine the historical significance of this unique American performing art.
- Discover textual clues to performance needs.
- Deliver an effective oral presentation of analysis.
- Cite sources using MLA style of documentation.

THA 68 – History of the Theater

Upon successful completion of this course, students will be able to:

- Develop an awareness of the major historical periods in theater.
- Develop an understanding of how history influenced theater.
- Demonstrate a knowledge of theater within a historical context.
- Relate theater to actors, directors, and production values of the particular cultures and eras studied.

- Effectively communicate thoughts and ideas to others.
- Critically evaluate the elements of dramatic action.
- Develop a sense of theater as a cultural force.
- Deliver an effective oral presentation of analysis.
- Cite sources using MLA style of documentation.

VI – English

Overarching Philosophy Statement:

The processes of reading and writing require that students demonstrate the same or similar competencies at increasing levels of complexity and sophistication as they move through the course sequence from ESL to Developmental to Freshman English.

A – English as a Second Language

ESL 07 – Basic Reading and Writing for Students Learning English as a Second Language

- Be more comfortable writing than they were when they began the course.
- Provide a guiding point or main idea for their essays.
- Respond to other authors in their own essays.
- Relate their own experiences and observations in their writings.
- Develop an ability to organize material in their writings.
- Familiarize students with the need to analyze ideas, whether from personal experience or from texts.
- Improve their knowledge of the conventions of Standard American Written English.
- Use a variety of strategies to approach readings.
- Identify important points and passages from their reading.
- Understand that reading involves continuous guesswork, prediction, and reconsideration.
- Make use of strategies to figure out the meaning of words from context.

ESL 07 – Basic Reading and Writing for Students Learning English as a Second Language (Example 2)

- Read and write with greater fluency than when they began the course.
- Provide a main idea for their essays.
- Respond to the texts of other authors in their essays.
- Describe their own experiences and observations in their writing.
- Develop the ability to organize their writing.
- Develop the ability to summarize and paraphrase what they have read.
- Understand the need to analyze ideas, whether from personal experience or from texts.
- Understand that reading involved continuous guesswork, prediction, and reconsideration.
- Understand writing as a process that involves drafting and reflection.
- Identify important points, passages, and quotations from their reading.

- Improve basic language competence, including grammatical knowledge and the use of strategies to figure out the meaning of words from context.

ESL 09 - Intermediate Reading and Writing for Students Learning English as a Second Language

- Be more comfortable writing than they were when they began the course.
- Provide a guiding point, main idea, or thesis for their essays.
- Respond to and use texts of other authors in their own essays.
- Relate their own experiences and observations to those of other writers.
- Improve their ability to organize material in their essays.
- Develop the ability to analyze ideas, whether from personal experience or from texts.
- Improve their knowledge of the conventions of Standard American Written English.
- Use a variety of strategies to approach a wide range of texts.
- Identify important points and passages from their reading.
- Be able to distinguish between main ideas and supporting details.
- Understand that reading involves continuous guesswork, prediction, and reconsideration.
- Make use of strategies to figure out the meaning of words from context.

ESL 09 - Intermediate Reading and Writing for Students Learning English as a Second Language (Example 2)

- Demonstrate greater independence as readers and writers than when they began the course.
- Provide a main idea or thesis for their essays.
- Respond to the texts of other authors in their essays.
- Relate their own experiences and observations to those of other writers.
- Include summaries, paraphrases and quotations from their readings to support the ideas in their writing.
- Improve the ability to organize their essays.
- Develop the ability to analyze ideas and express them with clarity.
- Demonstrate basic editing and proofreading competence following the conventions of Standard American Written English.
- Identify important points and passages from their reading, and distinguish between main ideas and supporting details.
- Engage in guesswork, prediction, and reconsideration as they approach a wide range of texts.
- Develop the ability to draft effectively and reflect on their writing process.
- Improve language competence, including grammatical knowledge and the use of strategies to figure out the meaning of words from context.

ESL 91 – Developing Fluency in Reading and Writing for ESL Students

- Be more comfortable writing an essay of several pages than they were when they began the course.
- Provide a thesis statement for their essays.
- Respond to and appropriately cite texts of other authors in their own essays.
- Bring their own experiences and observations into dialogue with those presented by other authors in other texts.
- Organize material in their essays to maximize rhetorical effect and comprehension.
- Improve their ability to analyze ideas, whether from personal experience or from texts.
- Improve their knowledge of the conventions of Standard American Written English.
- Use a variety of reading strategies to approach challenging texts.
- Identify important points and passages from their reading.
- Be able to distinguish between main ideas and supporting details.
- Understand that reading involves continuous guesswork, prediction, and reconsideration.
- Make use of strategies to figure out the meaning of words from context.

ESL 91 – Developing Fluency in Reading and Writing for ESL Students (Example 2)

- Understand that writing and reading are recursive, social processes that require feedback from others.
- Reflect on their own learning process in a way that helps them take responsibility for improving their reading and writing.
- Master the process of drafting their essays, which includes revision, editing and proofreading, first with and then without teacher and peer feedback.
- Write essays that respond meaningfully to a topic and develop ideas at length (at least three typed pages).
- Provide a thesis statement for their essays.
- Summarize, paraphrase and quote information relevant to their essay topics as a way of supporting their thesis.
- Make connections between the ideas in different texts and their own experiences.
- Organize ideas in their essays in a logical way.
- Understand and use the conventions of academic discourse in their writing.
- Improve their ability to analyze ideas, both from texts and their own experiences.
- Identify the main idea(s) in texts and distinguish main ideas from supporting details.
- Use a variety of reading strategies to approach challenging texts: annotation, figuring out meanings from context, prediction, close reading.
- Begin the challenging work of critical thinking that will be required in all of their future English courses.

B – Developmental English

Critical Writing
ENG 92 – Developing Competence in Reading and Writing
ENG 93 – Developing Competence in Writing

- Identify and explore issues of social and personal significance through writing.
- Analyze personal, specific experiences within larger frameworks and contexts.
- Demonstrate the ability to observe the basic conventions of academic essay writing.
- Analyze an issue, breaking it down into smaller, more manageable parts.
- Employ generalizations strategically to create hierarchy and structure within their writing.
- Use transition words and phrases meaningfully and construct transitional sentences.
- Paraphrase and respond to other writers' positions within their own essay writing. They should be more comfortable participating in a conversation among texts.
- Incorporate other texts in their own writing, specifically: selecting appropriate material to support a point of view, commenting on cited material effectively, integrating quotations and paraphrases into their own writing, citing quotations according to MLA citation style.
- Proofread their own work for grammatical correctness.
- Reflect on their own writing, and recognize reflection as an integral part of the writing process.
- Recontextualize the academic essay writing skills they have learned in the course and apply them to other writing situations, including the CUNY ACT writing exam.

Critical Reading
ENG 04 – Analytical Reading
ENG 92 – Developing Competence in Reading and Writing

- Generate their own questions (both local and global) about complex readings.
- Read carefully to notice subtle patterns in texts and be able to analyze them.
- Identify significant details in a text and to explain their importance to the text as a whole.
- Summarize a complex text.
- Notice and define similarities and differences between their own experiences and the experiences of people portrayed in texts.
- Recognize different genres.
- Distinguish different voices in texts.
- Use continuous guesswork, prediction, and reconsideration in their reading process.
- Read actively: marking meaningful passages and questioning the text as they read.
- Read critically: understanding other writers' arguments, biases, and use of evidence, and identifying moments that invite debate within a text.

- Reflect on their own reading, and recognize reflection as an integral part of the reading process.
- Facilitate their reading through many forms of writing, such as: comprehension questions, journal entries, essays.

C – Freshman English

ENG 12 – Freshman English I

- Write clearly focused, logically organized, and effectively developed essays.
- Employ rhetorical strategies effectively according to the purpose and audience for the essay.
- Incorporate texts as meaningful support for the essay, using summary, paraphrase, and quote.
- Use evidence from personal experience and observation as meaningful support for the essay.
- Draw meaningful connections among texts and between texts and personal experience.
- Synthesize information from several sources to support a thesis.
- Credit sources of ideas and supporting material other than one's own.
- Adhere to conventions of format, mechanics, grammar and diction.
- Write complex sentences and use an expansive vocabulary to express one's ideas.
- Analyze a writer's purpose, audience, and rhetorical strategies.
- Locate a text's organizing ideas; distinguishing ideas from evidence and opinions from facts.
- Recognize a writer's assumptions and beliefs, stated or unstated.
- Identify a writer's view from other views discussed in the text.
- Summarize a writer's essential argument and supporting points.
- Summarize, paraphrase, quote and interpret key passages in a text.
- Construct a defensible interpretation of a text.
- Evaluate the merit of ideas and evidence presented in a text.
- Make generalizations and inferences, and draw conclusions from textual sources.
- Compare and contrast ideas from different texts.

ENG 24 – Freshman English II

- Identify the problem or question at issue in readings of different genres and from different disciplines; find distinguishing and common themes in texts of different kinds.
- Use readings to develop and revise ideas, to expand fund of previous knowledge, and to arrive at new understandings.
- Generating interpretations of texts based on evidence of different kinds; examine evidence and sources of evidence in readings; question readings for accuracy, relevance, and completeness.

- Recognize attitude, tone, purpose, point of view, and intended audience in readings from a range of disciplines; identify bias; distinguish between facts and opinions.
- Appreciate how social, cultural, and historical contexts shape texts, meanings, authors, and readers; respond to texts not as isolated statements but as discussants in larger conversations with real-life stakes.
- Understand that different kinds of texts (novels, computer databases, scholarly articles) require different kinds of reading; apply different reading strategies, as appropriate, to different kinds of texts.
- Understand that reading is discovery; develop curiosity about the worlds opened up by reading; experience the excitement and enjoyment that reading can offer.
- Compose shorter and longer essays exploring issues in coherent detail, drawing on an interdisciplinary range of sources, including research sources; respond in fully-developed ways to writing assignments; present a problem in context of broader cultural and social considerations.
- Ask critical questions, informed by course readings, that lead to supportable thesis; support thesis through valid interpretations of evidence and analysis of relevant issues; rethink and revise thesis under the pressure of available evidence.
- Identify own perspective and position with regard to the issue in question; frame own view in light of other perspectives and positions.
- Use quotation, paraphrase, and summary by way of analyzing other ideas and developing/elucidating own ideas; incorporate quotation, paraphrase, and summary smoothly, accurately and appropriately.
- Use informal writing like prewriting, freewriting, brainstorming, journals, notes, lists, and outlines to help generate ideas; develop drafts of formal essays on the basis of informal writing; engage in active, significant revision of earlier drafts of formal essays to develop and modify ideas, find connections, shape arguments, and clarify language; proofread own essays, find errors, and make appropriate edits.
- Communicate clearly, correctly, fluently, and effectively, according to appropriate conventions of language; follow teacher instructions as to proper format and acceptable presentation of written work.
- Understand that writing is discovery; draw on own values, observations, and experience to enrich, enliven, and humanize essays, including essays that emerge from research; find ways to make writing meaningful and valuable, both to the writer and to potential readers.
- Access information and ideas that shed light on a given topic, issue, or problem, drawing on research sources including the library and the Internet; synopsize research sources, and identify relevant passages; use results of research to amplify/expand thinking and writing.
- Evaluate research sources for relevance, authority, complexity, and bias.
- Access CUNY+ to search CUNY libraries and KCC library holdings; locate books, journals, and periodicals in KCC collection; use bibliographic elements, like table of contents and index, to help find information and ideas.
- Use keywords in Internet and electronic database searches; use search engines in Internet searches; draw on a range of Internet and electronic databases resources

to locate information and ideas relevant to a research topic; evaluate websites for seriousness, objectivity, and usefulness.

- Document research sources fully and accurately, using academic conventions; avoid unintentional plagiarism through correct use of documentation; understand issues involving intentional or unintentional plagiarism; follow conventions to produce a Works Cited page.
- Draw generalizations and arrive at conclusions on basis of analysis of evidence; differentiate between thesis and support for thesis; differentiate between fact and opinion.
- Differentiate between reliable and unreliable observations; differentiate between reliable and unreliable statements of fact; find patterns of relationships in readings; form opinions while remaining open to new ideas and evidence.
- Uncover key assumptions; find logical inconsistencies; trace cause-and-effect relationships; test validity of inferences; develop arguments; consider counterarguments; challenge interpretations, ideas, and values found in reading and research; imagine alternatives.

VII – Foreign Languages

A – Chinese

CHI 1 – Elementary Chinese I

- Students will be able to read any arbitrary word rendered in pinyin (i.e. initials, simple and compound finals) as well as transcribe Chinese sounds in pinyin. They will also be able to pronounce and identify the four tones in individual sounds and sentences.
- Students will be able to initiate greeting dialogues in which they can introduce and inquire about: names, nationalities, and occupations.
- They will know how to form affirmative, negative, and interrogative sentences; recognize the absence of auxiliary verbs as well as a lack of word order change in forming interrogative sentences in Chinese.
- Students will be able to use the correct word order in Chinese to address people with titles (last name preceding title).
- Students will be able to describe family members and identify relations.
- Students will know that a "measure" word is always necessary between a numeral and a noun.
- Students will be able to tell and inquire about dates and time and express age.
- Students will further develop vocabulary for conversations that involve wider topics, such as hobbies. They will be able to talk about likes and dislikes, extend invitations to social and sports activities, and make comments about pastime activities.
- Students will develop their oral proficiency in Chinese by further increasing their vocabulary necessary for social functions. They will be able to express themselves while visiting and entertaining friends.
- Students will be able to make phone calls schedule appointments.
- Students will foster an awareness of the complexity and importance of family relations.
- They will acquaint themselves with the Chinese value of the collective against the individual vs. the US value of individualism.
- They will develop sensitivity to the differences in expressions among groups of Chinese due to geographical and political differences.

CHI 2 – Elementary Chinese II

- Students will know the history of Chinese characters and identify the fundamental elements (radical and phonetic) of a character. They will be able to recognize the basic Chinese radicals and use the correct stroke sequence in writing characters.
- Students will be able to read and write the Chinese vocabulary (in characters) that they have learned through pinyin in Chinese I.
- They will recognize and read out Chinese text directly from its original character form rather than through pinyin Romanization.

- They will be able to write the Chinese characters from memory and create their own texts using the characters.
- Students will acquire vocabulary items necessary to describe the subject of Chinese language learning and be able to express themselves about their experiences in learning Chinese.
- Students will be able to talk about school life and describe their routine schedule for and activities at school in the format of a letter or diary entry.
- Students will know the Chinese monetary units, both the formal and colloquial expressions. They will be able to interact with sales clerks to buy and exchange.
- Students will know how to count from 101 up till 10,000.
- Students will master more than a dozen of the "measure word + noun" combinations.
- Students will be able to describe and comment about the weather in different geographical areas.
- Students will be able to inquire about different forms of transportation, as well as comment on traffic.
- Grammatically, students will be able to construct topic-commented sentences.

B – French

FR 1 – Elementary French I

- Students will be able to read French and recognize differences and similarities between the French and English sound systems. They will become accustomed to both vocalized and unvocalized written French. They will understand the use, position and influence of diacritical marks.
- Students will apply their reading, writing, and oral skills to mastering the cardinal numbers and do simple mathematical tasks required in daily life in French.
- Students will master French and English definite, indefinite articles and nouns, their differences and similarities and will be able to achieve gender recognition through ending of words.
- Students will understand the use in context of ER verbs with their subjects and objects in reference to our daily activities and comprehend simple sentences made with those verbs.
- To familiarize students with adjectives that describe people, things and places. They shall be able to distinguish agreement, gender and number in their depiction.
- Students will be fluent in the oral expressions of greeting and introductions.
- Students will be able to read, write and translate introductions and greetings.
- Students will be able to identify features of gender and number in nouns.
- Students will recognize singular and plural forms of subject pronouns.
- Students will master affirmative and negative sentences. They will be able to respond to yes/no questions.
- Students will remember and apply technical vocabulary for first and last names; the prepositions/adverbs/conjunctions from, of, for, in, to, and, where.

- Students will identify regular verbs in the present tense as well as irregular and apply them within context.
- Students will synthesize present tense with use of the infinitive which translates near future actions.
- Students through the use of verbs avoir (to have, literally) linked with idioms will express their feelings of being cold, warm, correct, incorrect, hungry, thirsty and sleepy.
- Students will communicate their actions through the use of verb faire (to do, to make literally) associated with idioms such as doing the cooking, cleaning, laundry, to take a walk, a trip or to make a decision.
- Students will demonstrate the ability to make coherent sentences about parts of the house and clearly state what they do in the shower, living room, dining room, kitchen and bedroom.
- Students through those parts of speech will exhibit ownership and define situations in which both are used. They will distinguish the different forms of possessive adjectives as being applied to gender and number, masculine and feminine, singular and plural.
- Students will apply the vocabulary learned to communicate their use of days of the week, months; tell the date as well as the time. They will also identify the differences between an action that is taking place on any day of the week and one that happens the same day every week,
- Students will synthesize their communicative skills to be able to use interrogation and identification in dialogue in reference to people, places and things.

FR 2 – Elementary French II

- Students will be able to describe what they study, places of study and career aspirations using the present and the past tenses, combining them with the infinitive.
- Students will be able to use: regular ER verbs as parler (speak), travailler (work), aimer (love), and habiter (live); regular RE verbs as repondre (respond), render (return) descendre (go down), and perdre (lose); Regular IR verbs such as finir (finish), choisir (choose), reussir (succeed), reflechir (think) and obeir (obey).
- Students will further demonstrate their knowledge by remembering and using the correct preposition in association with certain IR verbs such as ober a, reussir a, reflechir a, but choisir de.
- Irregular verbs as dormir (sleep), sortir (go out), mentir (lie) and servir (serve).
- Irregular verbs avoir (have), etre (to be), aller (to go), faire (do and make), venir (come), prendre (take), mettre (put), boire (drink) in the present and in the past.
- Students will demonstrate the ability to work with and illustrate being in a French restaurant and ordering food and beverages, to ask for the bill and give a tip to the attendant. They will be able to use appropriately partitive articles, expressions of quantity and the vocabulary pertaining to food items and beverages in general.
- Students will be able to understand and use the imperative, all three forms, to issue clear commands in different groups of regular verbs as well as irregular.

- Students will succeed remembering parts of the human body and use them in verbal and written forms. They will further indicate some minor diseases that affect the body.
- They will gain the ability to refer to actions done by the subject on self as well as reciprocal actions. They will further illustrate interrogative, affirmative and negative sentences in context.
- Students will remember time and weather expressions to be able to describe all kinds of weather conditions and appropriate clothes to wear in different situations.
- Students will use correctly vocabulary pertaining to careers and professions. They will further distinguish different places in Paris and be able to locate them. They will also identify important dates in history.
- Students will be able to indicate and describe their country of origin where they lived in the past and where they are currently living. They will be able to use: the present and past tense of verbs: vivre (to live), habiter (live, reside), voyager (travel) and naitre (to be born).
- Students will be able to locate geographical countries of origin and express them in French. They will also distinguish the gender and number in countries and make the correct agreement between countries and prepositions that precede them.
- To use effectively the question words to which, in which, on which, in masculine and feminine, singular and plural.
- To use the questions when?, from?, where?, and to where?
- To know adjectives and adverbs describing living conditions and weather/climatic conditions.
- Students will demonstrate the ability to use colors in association with fashion and clothing. They will do so in applying differences referring to gender and number, masculine and feminine, singular and plural. They will remember important verbs that go with clothing such as avoir (have), acheter (buy), and porter (wear).
- Students will be able to differentiate means of transportation such as the train, the car, the airplane and the boat.
- They will retain by continuous reinforcement the vocabulary inherent to traffic such as: red, green, yellow light, speed limit, rush hour, drivers, pedestrians, parking tickets and lead-free gas.
- They will be able to synthesize means of transportation with time and time expressions.
- Students will effectively express past conditions, emotions, state of mind, ongoing actions and past habitual actions. They will remember the Imperfect, its use and the ending patterns of all the forms.
- They will further differentiate the Imperfect from the compound tense called the Passe Compose.

FR 3 – Intermediate French I

- Students will succeed issuing formal requests and inquiries in present tense and with the use of the infinitive.

- They will be able to master verbal and written ability in expressing what they mean coherently and to interact with the speakers of the target language.
- They will be able to achieve sustaining ability handling extensive conversation which transcends the immediate environment and reaches social and cultural contexts.
- They will be able to use indicative of regular and irregular verbs in interrogative, affirmative and negative sentences.
- They will be able to decipher, understand, interpret and analyze literary passages.
- Students will be able to experiment with irregular verbs to demonstrate their ability to communicate.
- Students will achieve: affirmative, interrogative and negative sentences with regular, irregular and reflexive verbs.
- Do written and oral exercises illustrating the topics noted above.
- Read and understand the cultural component in which these topics are used.
- Achieve successfully the review and reinforcement of topics studied in French 1 and 2.
- Students will achieve structuring sentences containing the definite (le, la, l' and les), indefinite articles (un, une, and des), regulars and irregular nouns.
- Read and comprehend passages illustrating those parts of speech.
- Students will recognize that after certain verbs in the present tense and some expressions, one may use the infinitive. Ex: Nous aimons manger en ville. Ex: Nous sommes en train d'etudier.
- Students will be able to express and understand fully how to compare people, animals and things to distinguish superiority, equality and inferiority.
- Students will achieve understanding of passages related to topics above.
- Students will evaluate efficiently possessive adjectives that indicate ownership and possession (mon, ma, mes, ton, ta, tes, etc…)
- Students will master the use of the imperfect and compare it with the preterit for similarities and differences. Ex: J'allais au cinema le vendredi. And Je suis alle au cimena vendredi. (I used to go to the movie on Fridays/ I went to the movie Friday).
- Students will recognize how to express sentences with venire de for recent past and aller with the infinitive for immediate future (future proche). Ex. Je viens de lire au roman and Je vais etudier a la bibliotheque (I have just read a book / I am going to study at the library).
- Students will differentiate different groups of French descriptive adjectives that would help them establish how to describe people, animals and things according to gender and number.
- Students experiment the use of partitive articles (du, de la, des and de l', some any) to buy in series (un, une des) food items and beverages and express liking and disliking with definite articles (le, la, l', les).
- Students will demonstrate ability to use direct and indirect object pronouns to avoid unwanted repetition. Ex: Je parle a Joseph – Je lui parle. (I am speaking to Joseph / I am speaking to him). Ex: J'aime Paulette – Je l'aime. (I love Paulette / I love her).

- Students will formulate the past tense with helping verbs avoir and etre to achieve past completed action.
- Students will develop skills pertaining to the place, formation and use of the adverb, on of the most modifying part of speech.
- Students will evaluate and distinguish between people, things and places from others by using adequately demonstrative adjectives (ce, cet, cette, ces, _ci et la.) (this, that, these, those).
- Students will use the subjunctive to communicate uncertainty and wishes during the holiday season and the New Year.

FR 4 – Intermediate French II

- Students will demonstrate the use of the future, the ability to form it and communicate by using all its forms and show with what tense it would agree.
- Students will be able to describe and apply conditions in which the present, past, future and the conditional are used.
- Students will be able to distinguish adverbs from other parts of speech and establish their place in a sentence and other parts of speech they modify.
- Students will achieve agreement of tenses through different illustrations and recognize that the present of indicative will agree with the future; the imperfect with the conditional; the plus perfect will go with the past conditional.
- Students will criticize social attitudes of French and Francophone people and compare their behavior with their own.
- Students will differentiate many literary pieces from different eras and with different themes and structures.
- Students will describe disjunctive pronouns (moi, toi, lui, elle, soi, nous, vous, eux, elles) Ex: Toi et moi, nous ferons des voyages ensemble (you and I will travel together) and distinguish the appropriate one to use accordingly.
- Students will apply successfully the use of the subjunctive, present and past to communicate possibility, wishes, subjectivity, desires and when in a sentence the subordinate clause takes place before the main clause.
- Students will demonstrate the ability to express the present participle and the gerundive Ex: ne faut pas parler en mangeant (One must not talk while eating).
- Students will restate skills for reading and understanding by going through short but interesting articles from French newspapers.
- Students will define the use of the plus perfect and demonstrate the ability to express an action that occurred before another.
- Students will discuss different usages of the past tense, establish its formation and the process to follow to build the passé compose.
- They will formulate sensible sentences that could be linked through relative pronouns.
- Students will demonstrate the ability to use appropriate gender in respect to countries and correct prepositions used in front of the.
- Students will exhibit the ability to use present and past actions on themselves involving the reflexive present and past tense.

- Students will recognize and compare clearly the use of the subjunctive as opposed to the infinitive.
- They will evaluate, criticize and respond to literary texts and genres read during the semester and respond to social issues encountered in their reading.

FR 57 – Culture and Civilization of Haiti

- Students will recognize and accumulate a general knowledge of cultural and historical trends, ideas and values of the Republic of Haiti.
- Students through their acquired cultural awareness and sensitivity will be able to respond to the tragic predicament of the Haitian people.
- Students will exhibit mastery of the historical socio-economics of Haiti since 1804, the year of the liberation, to the present.
- Students will evaluate the philosophical and ideological contributions of Haiti to the world patrimony through its celebrated literature.
- Students will determine the importance of the concept of Negritude through Jacques Roumain's literature and debate its enduring impact on Haiti and the world.
- Students will discuss and criticize the European colonization of Haiti through the Spanish conquest (1492-1503).
- Students will debate the English occupation of the South of Haiti (1776-1779) and define its impact on the island.
- Students will distinguish the main phases of the French colonization of Haiti and determine its enduring consequences beyond the war of independence.
- Students will recognize, differentiate and interpret concepts and implementation of slavery and genocides through the history of Haiti.
- Students will select, debate and criticize the concepts of Liberty, Equality and fraternity expressed by the forefathers of Haiti – Toussaint, Dessalines, Petion and Christophe.
- Students will research and review Haiti's altruistic experience towards the United States, Mexico and Latin-American countries through Pan-Americanism.
- Students will define and formulate the main factors that caused the so-called 'Haiti's century of anarchy' through the 19th century.
- Students will describe and discuss the causes of the American occupation of Haiti (1915-1934) and its multiple repercussions.
- Students will review the troubled relationship between Haiti and the Dominican Republic and evaluate the "Haitian tragedy" in which 25000 Haitians were killed.
- The students will define the reign of Duvalier (1957-1971) and Duvalierism as a political ideology, evaluate the impact of this Caribbean cyclone that generated a very massive exodus, thousands of braceros (cane cutters in the Dominican Republic) and countless boat people.
- Students will distinguish the main characteristics of Haiti after the fall of Duvalier, determine the causes of those long years of turmoil and evaluate the quest for stability.

C – Hebrew

HEB 1 – Elementary Hebrew I

- To be able to read Hebrew in block script and transcribe it into cursive script.
- To understand how the Hebrew alphabet contrasts with the English alphabet.
- To distinguish between the consonants and the symbols that represent the vowels.
- To distinguish between the Sfardi and Ashkenazi pronunciations.
- To become accustomed to both vocalized and unvocalized written Hebrew (Hebrew written without the vowel symbols).
- To understand use and position of diacritical marks (dageshim).
- Students will apply their reading, writing, and oral skills to mastering the cardinal numbers 1-20, both in masculine and feminine, and the ordinal numbers (used also for the names of the days of the week).
- Locate the geographic areas, major cities of the land of Israel, and some historical landmarks of Israel.
- To familiarize students with the history of the Land of Israel, its ambience, and the development of modern Hebrew.
- Students will be fluent in the oral expression of greetings and introductions.
- Students will be able to read, write, and translate introductions and greetings.
- Students will be able to construct an introductory dialogue.
- Students will recognize gender features of singular and plural nouns.
- Students will identify singular and plural subject pronouns; demonstrative pronouns; the definite article.
- Students will apply singular and plural nouns and pronouns, demonstrative pronouns, and the definite article to the context of introductory conversation.
- Students will recognize the absence of the indefinite article in Hebrew.
- Students will respond to Yes/No questions.
- Students will remember and apply technical vocabulary for first and last names; the prepositions/conjunctions/adverbs *from, of, for, in, to, and, from where*; and singular and plural possessive pronouns.
- Students will understand, identify, and apply use of semikhut (contraction of nouns and possessive pronouns) in context of names and introductory questions.
- Students will be able to identify regular verbs in present tense, binyan kal (simple verb construction), as well as the irregular verb groups of lamed- hay and ayin-vov, and verbs with pharyngeal letters, to distinguish between them, and apply them to these contexts.
- Students will synthesize present tense with use of the infinitive.
- Students will express agreement of nouns and adjectives and agreement nouns and demonstrative pronouns.
- Students will synthesize agreement of nouns and adjectives with expressions of possession (yesh/ein); the indirect object pronouns; and technical vocabulary for names of family members.

- Students will be able to identify verbs in the passive construction (binyan nif'al) and contrast usage with verbs in simple construction (binyan kal); and apply verbs in nif'al to geographical location.
- Students will synthesize their communicative skills in nif'al and new vocabulary to ask for and to give directions.
- Students will synthesize their number skills with new technical vocabulary to express age and time.

HEB 2 – Elementary Hebrew II

- Students will be able to describe what they study, places of study, and career aspirations using the present and past tenses, synthesizing these with the infinitive.

Students will be able to use:

- Regular verbs (shelemim) in binyan kal (simple verb action) in present and in past tense with noun/pronoun agreement in masculine and feminine singular and plural forms.
- The infinitive in shelemim, banyan kal.
- Lamed hay verbs in present tense (with proper agreement).
- The infinitive in lamed-hay.
- Lamed-hay verbs in past and present (to be, to do) to respond to the questions of what one wants to do or to be.
- Students will be able to infer grammatical principles of shelemim and lamed hay verb construction in binyan kal from examples used, and apply them to other verbs.
- Students will use vocabulary pertaining to careers and subjects of study.
- Students will be able to describe from which countries they and their families originate, to describe where they lived in the past and where they are currently living, and describe their places of residence.

They will be able to use:

- The present and past tense of ayin-vav verbs in binyan kal (simple verb construction), especially the verb lagur (to reside).
- To infer grammatical principles of the ayin-vav verb construction from examples used.
- To use the question words *to which, in which, on which* in masculine and feminine, singular and plural.
- To locate geographical countries of origin and to express them in Hebrew.
- To ask and to answer *when? From where? To where?*
- To know adjectives and adverbs describing living conditions (expensive/inexpensive, private/alone, together) and vocabulary relating to residential dwellings.

Students will be able to:

- Use the pharyngeal (pay-gronit) verb to work (la'avod) in present and past tense (with agreement), and its infinitive to communicate information about one's work.
- Infer grammatical principles of pay gronit verb construction from examples used.
- Use ordinal numbers to describe his workdays/days of the week.
- Describe the number of hours he works using cardinal numbers in feminine gender and dates using cardinal numbers in masculine gender.
- Use vocabulary relating to time (early, late, during) and telling time.
- Increase their fluency with other ayin-vav verbs (lakoom, lashuv).
- Describe at what time he rises and when he returns home.
- Use lamed gronit verbs in past and present in binyan kal (use of verb linsoa – to travel).
- Infer grammatical principles of lamed gronit verb construction from examples used.
- Know vocabulary relating to means of transportation.
- Use directional verbs: to go, to travel, to run, to fly.
- Describe possession in present and past.
- Use yesh and ain with objective pronouns (lee, lekha, etc.) in present possession and.
- Use verb to b in past tense (used with expressions of past possession).
- Know the possessive pronouns (mine, yours, etc.) in singular and plural.
- Contract possessive pronouns and nouns.
- Form semikhut construction (contraction of noun+noun with deletion of hay and shel).
- Recognize and decode composite words that are contractions of nouns and possessive pronouns.
- Recognize and decode composite words that are in semikhut construction.

Students will:

- Know vocabulary relating to names of family members.
- Differentiate between masculine and feminine nouns and adjectives in singular and plural.
- Describe age.
- Use adjectives relating to age and family status; use adjectives as predicates.
- Discern when to use direct object particle, et and implement its use.
- Construct statements using direct object personal pronouns in singular and plural with verbs to love/hate, to meet, to see, to want, to hear.
- Use the verb *to need* and the modal verb, *to be able.*
- Implement the pa'el construction to express happiness, sadness hunger, contentment, fatigue.

Students will be able to:

- Comprehend when to use the indirect objective pronouns inflected with the preposition with and implement these pronouns to describe with whom they eat, travel, work, live, share leisure activities.
- Use lamed-alef verbs in past and present to discuss reading and going out.
- Describe what he likes to do and where he is going to spend the evening.

- Give and follow simple directions.
- Conjugate regular and irregular lamed alef verbs in the nif'al construction, especially the verb to be found (lehimatze).
- Apply these structures to expressions of location.
- Know directional vocabulary.
- Apply the verbs of eating and drinking in past and present, including regular verbs (shelemim) in present tense piel, (intensive construction), e.g. verbs for cooking, frying, to a restaurant or supermarket framework.
- Apply principles of piel construction to other verb roots, e.g. to speak (ledaber), to tell (lesaper).
- Know vocabulary pertaining to food.
- Implement the hifil (causative) construction of regular verbs in present tense to express the actions of inviting and/or ordering, preparing, starting.
- Apply principles of hifil construction to other verb roots (e.g. to understand).
- Use the verbs *to help, to know* in past and present and to use the verb *to request* (piel construction) in present tense.
- Apply efshar, e-efshar with infinitive to communicate requestes.
- Apply phrases of thanks and apology.

Students will:
- Identify geographic locations.
- Recognize and appreciate the historical and cultural content of the cities, various streets, institutions, and landmarks in Israel.
- Become acquainted with some culture-laden songs.

HEB 3 – Intermediate Hebrew I

Students will be able to state formal requests and inquiries in past and present and with use of infinitive. They will be able to:
- Use the pi'el construction, using verbs lekabel (to receive), levakesh (to request).
- Use the hif'il and haf'al constructions with verbs lehakhin (to prepare), lehavin (to understand), and their passive uses in haf'al
- Use expressions with ikhpat.
- To conjugate the hitpael of lehitkasher (to communicate, telephone) in past and present and infer grammatical principles of pi'el, hif'il, haf'al, and hitpa'el from examples used.
- Synthesize verb forms with the corresponding objective pronouns (bishvili, etc., otee, etc., lee, etc., mimkha, etc.).
- Formulate apologies.
- Conjugate the irregular verb lehitztaer (to be sorry), in hitpael construction, in present and past tenses.
- Recognize irregularities in hitpael conjugations and decode these verb roots.
- Use the future tense of the verb lisloah (to forgive, excuse).
- Construct statements with the hitpa'el verb, lehitnazel (to apologize).
- Conjugate the verb to be in future tense.

- Conjugate the verb to be in future tense.
- Conjugate the verb to be able in past, present, and future.
- Voice disagreement, using verbs yakhol, lehaskim, mitkabel, zodek.
- Describe pain (past and present) in parts of body, and fever (yesh lee, hayah lee construction).
- Ask how much foot items cost (past and present of hamed-hay verb la'a lot).
- Use verbs of eating, drinking, cooking, and baking in past and present tenses (lamed-hay and shelemim verbs, binyan kal and pi'el).
- Use predicate adjectives describing states of hunger, thirst, and satiation in past and present.
- Use expressions with the phrases kvar (already) and od lo (not yet).
- Describe food items and supermarket settings.
- Synthesize vocabulary and language structure to comprehend articles in newspapers and magazines related to food and diet.

Students will demonstrate fluency with:

- Past tense lamed –alef verbs (review).
- Hif'il verbs in past and present (lehathil – to start, lehashir – to leave).
- Hitpael of lehitkasher (to get in touch/communicate), and apply grammatical principles to other hitpael verbs in gizrat shelemim.
- P'iel of letaken (to repair), and apply grammatical principles to other pi'el verbs in shelemim.
- The passive form (mishkal pa'ul), is broken.
- Vocabulary related to emergency situations.
- Verbs and vocabulary describing need – (the verb tzarikh in past and present) and urgency (dahuf, retzini).
- Describe their daily schedules.
- Use ayin-vav verbs in binyan kal, past, present, and future and hitpael (reflexive) verbs in past and present.
- Apply hif'il (causative verb construction) and nif'al (passive construction) to describe when work and/or classes start and are finished.
- Apply time expressions denoting intervals and frequency.
- Apply the predicate adjectives panui and asuk with appropriate gender agreement.
- Demonstrate fluency with the hif'il verb to invite/to order (lehazmin).
- Infer grammatical principles from this example.
- Write formal invitations.
- Use verbs of buying and selling in past and present (limkor, liknot); and bringing (the irregular verb lehavi, in hif'il).
- Use expressions describing sale items and discounts.
- Describe when an event will take place.
- Describe age.
- Use the verb to be in past and future.
- Use the nif'al construction of the verb lehevaled (to be born), in past and present.
- Describe their plans and preparations using the verbs to prepare (lehakhin – hif'il), to be prepared (huf'al), to plan (lehitkonen – hitpael), to take a trip (letayel – pi-el), to arrange (lesader – pi-el).
- To synthesize these verb forms with accompanying vocabulary items.

- Use verbs relating to airplane take-offs (lehamri) and landings (linhot) and vocabulary relating to airports.
- Use the verb lehipared in nif'al – to take leave.
- Use the verb to travel (linsoa) in past, present, and future and to fly (latus) in past, present, and future.
- Use verbs relating to bus transportation: latzet (to leave), lehakot (to wait), leashen (to smoke), linhog (to drive), lehanot (to park), lehagia (to get to), la'atzor (to stop), lehipaga (to be injured).
- Review and attain fluency in future tense in shelemim, binyan kal.
- Review and attain fluency in future tense of verb to be.
- Gain practice with pay-gronit verbs in future tense, binyan-kal – to work, return, stand (on line), to think (la'avod, la'azor, la'amod, lahshov).
- Use verbs and vocabulary pertaining to activities as spending time, climbing, exercising, hiking, dancing.
- Describe weather conditions in past, present, and future.
- Describe clothing items and accessories needed for the different seasons and weather conditions.
- Recognize the enduring impact of Hebrew culture on humanity.
- Recognize the expansive culture of Hebrew language and its speakers.
- Sample cultural material that reflects the history, attitudes, and social ambience of the Land of Israel.

HEB 30 – Hebrew Literature in Translation I

- Students will recognize and have a general knowledge of and appreciation for the contributions of classical Hebrew literature from the post-canonical era until modern times.
- Students will be able to determine the point of view, values, or intent of instructive material. They will understand the ideologies inherent in the various genres of classical Hebrew literature and gain an understanding of and appreciation for differences in cultures.
- Students will analyze writings of the Greco-Roman age (The Apocrypha, Flavius Josephus); and compare these literary works to artistic portrayals and to historic and contemporary events.
- Students will be able to distinguish between the various components of the Oral Law, particularly the Mishnah, Midrash, and Talmud. Students will compare and interpret exegesis of leading biblical commentators. Students will be able to explain and analyze poems of the Golden Age of Spain, and be able to detect and connect underlying themes and ideologies.
- Students will explore the ethical masterpieces of classical Hebrew literature and develop a sensitivity to and appreciation of ethical issues.
- The student will be able to articulate and argue his positions; to develop his thoughts and perspectives on the reading material, to formulate and understand his own values and to become aware of others' values, and to make informed intelligent value decisions.

- Students will be able to interpret instructive material; to summarize information accurately; to reduce information into meaningful components for analysis; to perceive and create logical coherence and discernible themes and patterns across different bodies of information.
- Students will be able to gain intellectual flexibility and to be open to new ideas and information.
- Students will develop an awareness and respect for ethnic and national differences. Students will understand and be sensitive to the range of political, religious, and cultural realities pervading our society and world events.
- Students will react personally to the literature read and relate the subject matter to their personal lives. They will gain perspective through critical thinking and exploration of points of view.

HEB 31 - Hebrew Literature in Translation II

- Students will be able to discern the various trends of Modern Hebrew Literature and appreciate the complexity and intensity of motifs and issues that preoccupied the modern Hebrew writers.
- They will be able to determine the point of view, values, or intent of instructive material, to abstract meaning from the material read, and to compare trends studied to contemporary situations.
- Students will be able to compare and contrast the ideology of the Jewish Enlightenment to that of the European Enlightenment.
- Students will be able to analyze and interpret writings of representative Haskalah authors: Mendelssohn, Wessely, Judah Leib Gordon, Mendele Mokher Sefarim.
- Students will be able to correlate the relationship between Hasidism and Jewish Mysticism (the Kabbalah), recognize the themes and motifs in Hasidic literature, discuss the features and ideology of Hasidism, and understand the conflicting trends of Hasidism and Haskalah.
- Students will explore the criticism and demise of the Haskalah, compare and contrast the themes of Haskalah literature to those of Hasidism and Zionism.
- Students will evaluate sample writings of pre-cursors of Zionism and early Zionist writers: Smolenskin, Ahad Ha'am, Aaron David Gordon, and Rabbi Abraham Isaac Kook.
- The students will be able to articulate and argue his positions; to develop his own thoughts and perspectives on the reading material, to formulate and understand his own values and to become aware of others' values; to make informed, intelligent value decisions.
- Students will be able to interpret instructive material; to summarize information accurately; to reduce information into meaningful components for analysis; to perceive and create logical coherence and discernible themes and patterns across different bodies of information.
- To gain intellectual flexibility and to be open to new ideas and information.
- To understand and be sensitive to the range of political, religious, and cultural realities pervading our society and world events.
- To relate the subject matter to their personal lives.

- To react personally to the literature read.
- To correlate, synthesize, and integrate the diversity of information and ideas.

D – Italian

IT 1 – Elementary Italian I

- Students will be able to notice the difference from the English language to the phonic style of Italian, they will also recognize the relations to English cognates.
- Students will be able to greet each other; exchange telephone numbers, date of birth, and addresses.
- Students will be able to describe their towns, cities or place of birth, and will also be able to give directions to school, home or place of work.
- Students will be able to explore the difference of formal and informal pronouns and compare the difference from the use of the English version 'to have' to the Italian AVERE.
- Students will be able to identify the masculine and feminine nouns in its singular or plural version.
- Students are capable of writing a physical and personal description of themselves and their families, and orally exchange the information with other students in the classroom.
- Students will be able to compare the three different Italian infinitive forms with their English equivalent.
- Students will be able to compare and conjugate the three different Italian Infinitive endings -are, -ere, -ire, understand simple sentences in the present.
- Create oral and written sentences in the present tense using the verbs lists and the introduced vocabulary.
- Students will enhance their conversation with their everyday lifestyle: things they are able to do, things they want to do and things they must do, also places to go, and things to say.
- Students will compare the traditional Italian foods with American fast foods. They will be able to exchange menus or learn how to cook a meal.
- Students will extend their conversation by narrating things they did over the weekend or in the past.
- Students will discover the different uses of "to know something or someone" and "to have knowledge of something or someone".
- Students will express their awareness for things they like or dislike.

IT 2 – Elementary Italian II

- Students will be able to express their need, their obligations, and what they are able to do by using the verbs to want, to have to, and to be able to (volere, dovere and potere) in present tense form, past tense with noun/pronoun agreement in masculine and feminine singular and plural forms.
- To be able to share their family values, describe each member of the family, and learn about their family tree.

- Students will learn the direct object pronoun to avoid repetition and to expand their communication skills to an intellectual level.
- To involve the student in planning for a trip or vacation, and integrate countries and cultures.
- Learn weather expressions, climates, and seasons. Students will express their favorite month and why in relation to the weather.
- Students will be able to talk about their childhood, the way they were, the things they did, places they went: (used to, would, was+ …ing).
- Students will acknowledge the differences between the negative forms of English to the double negative of Italian with special negative expressions: (non…affatto, non…mai, neanche, ne'…ne', nemmeno neppure, non piu, niente, nessuno).
- Students will expand their interest in communicating with more emphasis on expressions and clarity.
- Learn about the Italian designers and their fame all around the world, compare fashion to other countries, and fashion in the cinema world.
- Discuss the latest fashion and the latest colors.
- Compare European sizes to American sizes, and talk about their favorite color.
- Students will learn how to narrate a story (ex: Little Red Riding Hood) and create one of their own by using the two forms of the past: the ***imperfect*** tense describes habitual, recurring, or ongoing actions whereas the ***passato prossimo*** describes specific completed action.
- Students will discover that there are two different forms of to know in Italian: one is *"conoscere"* to know someone or something, and the other is *"sapere"* to know information about someone or something. To exchange information about restaurants, clubs, places as well as friends and relatives.
- Students will discuss places to go during the winter months; long weekends and winter vacations. Students will use the various conjugations of the verbs sciare, setirsi, stare, capitare, incontrarsi, nuotare, and prestare during these conversations.
- Students will practice the previously learned adjectives and verbs by using them with the parts of the body, and describing physical characteristics.
- Students will use the verb to like (piacere) and integrate the verb with other verbs. They will express themselves, talk about their hobbies, things they like to do, and things they like to eat.
- Students will understand the difference between reflexive verbs and reciprocal reflexive. Students will expand their communication skills by using verbs like to share, to help each other, to see each other, to know each other…
- To express preferences related to sports, discuss past events, teams, games, famous sports players, and fans.
- Students will make plans for the future, the weekends, the summer vacations, their graduations, and their future career.

IT 70 – Italian Cinema

- Student will be able to look further into the development of cinema and correlate the nature of film texts to their ever-changing historical, industrial, and sociological contexts.
- Recognize the similarity that exists between the two genres.
- Analyze how past social problems are weaved with today's social issues.
- Understand and theorize the complex relationships that exist between film artifacts, the media industries, and Italian cinema.
- Understand how film forms structure and shape the meaning of the content it expresses and integrate film theories into their own critical activities.
- To recognize and evaluate how the changing nature of cultural diversity (including issues of race, class, gender, and sexuality) impact film production and consumption in the region.
- Demonstrate critical writing, thinking, and understanding as it applies to these film industries, film consumption and production, and gain an awareness of how filmic products are produced and consumed in the national contexts of Italian cinema and Neorealism.
- Promotes the students to an intellectual level of maturity and a clear understanding of self-discovery.
- Understand the importance of imagination, creativity and strategic thinking needed to formulate an accomplished and artistic film artifact.

E - Spanish

SPA 1 – Elementary Spanish I

Students will be able to:

- Recognize the differences and similarities between the Spanish and English sound systems through the comparisons of cognates and near cognates.
- Greet people at different times of the day in Spanish.
- Use expressions of courtesy in Spanish.
- Recognize useful commands for class in Spanish.
- Spell and pronounce in Spanish the cardinal numbers.
- Complete with Spanish words mathematical series of different sequences.
- Identify the Spanish equivalencies of the English definite and indefinite articles, nouns, and adjectives.
- Establish the difference in gender and number in Spanish definite and indefinite articles, nouns, and adjectives.
- Spell definite and indefinite articles, nouns, and adjectives in Spanish.
- Change articles, nouns, and adjectives from singular to plural and vice versa.
- Change articles, nouns, and adjectives of persons and animals from masculine to feminine and vice versa.
- Compare the three different Spanish infinitive forms with their English equivalents.
- Identify Spanish subject pronouns.
- Differentiate the formal forms from the familiar forms.

- Use the corresponding subject pronouns according to who the subject is.
- Understand simple sentences in the present, the preterit, and the imperfect tenses using the verbs from the given lists according to different infinitive endings.
- Interpret texts in the present, the preterit, and the imperfect tenses based on the verbs lists and the introduced vocabulary.
- Create oral and written sentences in the present, the preterit, and the imperfect tenses using the verbs lists and the introduced vocabulary.
- Recognize the Spanish contractions as a combination of two words.
- Use the Spanish contractions properly in the oral and written forms.
- Interpret questions and negative statements in Spanish.
- Create interrogative and negative sentences in Spanish.
- Interpret questions with interrogative words.
- Answer questions that use interrogative words.
- Ask questions using interrogative words.
- To use the “personal a” in front of any direct object if it is a person or persons in both oral and written forms.
- Use the expression “hay” in oral and written forms when followed by a singular or a plural object in affirmative, interrogative, and negative sentences.
- Identify the names of the months and seasons of the year.
- Understand simple sentences using reflexive forms.
- Interpret texts using reflexive forms.
- Crete oral and written sentences using reflexive forms.
- Interpret expressions related to weather and human emotions or physical needs using idiomatic expressions with tener and hacer.
- Create oral and written sentences using idiomatic expression with tener and hacer.
- Understand simple sentences using indefinite words.
- Interpret texts using indefinite words.
- Create oral and written sentences using indefinite words.
- Change indefinite expressions from affirmative to negative and vice versa.
- Identify the parts of the body using Spanish names.
- Use the corresponding names in sentences, in oral and written forms.

SPA 2 – Elementary Spanish II

Students will be able to:

- Recognize the differences and similarities between the direct object and the indirect object.
- Replace Direct and Indirect Objects with their corresponding pronouns.
- Use object pronouns in oral and written constructions.
- Use verbs requiring indirect objects in oral and written forms.
- Recognize sentences in the Perfect Tenses in the Indicative Mood.
- Establish the differences in forms and meanings between simple and perfect tenses in the Indicative Mood.
- Create oral and written sentences using Perfect Tenses in the Indicative Mood.
- Recognize sentences in the Future Tense.
- Create oral and written sentences using the Future Tense.

- Recognize sentences in the Conditional Tense.
- Create oral and written sentences using the Conditional Tense.
- Compare two or more elements using adjectives, nouns, verbs or adverbs in oral and written sentences.
- Interpret sentences in the present, imperfect, and perfect tenses in the Subjunctive.
- Create oral and written sentences using the present, imperfect, and perfect tenses in the Subjunctive.
- Identify the differences between the Indicative and the Subjunctive Mood.
- Understand the forms and meanings of Spanish conjunctions and prepositions.
- Use Spanish Prepositions and conjunctions in oral and written expressions.
- Recognize the difference between the passive voice and the active voice.
- Change sentences from the active voice to the passive voice.

SPA 3 – Intermediate Spanish

Students will be able to:

- Initiate a regular conversation.
- Focus on the problem.
- Locate the main idea and supporting details.
- Connect events.
- Contrast information.
- Present a thought-provoking chat.
- Distinguish between the essential and non-essential.
- Retell a conversation.
- Distinguish between fact and fiction.
- Interpret a radio newsbreak.
- Report and interview.
- Sort out details.
- Debate with respect and tolerance.
- Compare different opinions.
- Interpret symbols in poetry.
- Identify humor and irony as the more important characteristics of a satiric text.
- Define and compare characters in short stories.
- Establish the authors' point of view.
- Differentiate literary genres.
- Compose short essays.
- Write letters.
- Prepare a restaurant critique.
- Maintain a diary.
- Create a short story.
- Prepare a TV program critique.
- Prepare a film critique.
- Recognize the differences and similarities between the present tense and the imperfect tense used to express usual actions.
- Identify, describe, and locate persons and events using **ser, estar,** and **hay.**

- Express how long ago an action was performed.
- Use the present progressive tense and the imperfect tense to express actions in progress in the present and in the past.
- Describe a certain aspect of quality of something using the expressions **lo + adjective**, etc.
- Talk and write about the same person, animal or thing without the repetition of their corresponding nouns with the proper use of pronouns.
- Use the future in a present context and the conditional in a past context.
- Express commands, doubt, disbelief, non-existence, requests, suggestions, etc. using simple subjunctive tenses.
- Express commands, doubt, disbelief, non-existence, requests, suggestions, etc. using perfect subjunctive tenses.

SPA 4 – Readings in Hispanic Literature

Students will be able to:

- Read Spanish literary texts from different authors, centuries, and countries.
- Answer questions of comprehension related to the readings.
- Analyze, compare and debate the assigned readings.
- Debate the differences and similarities among Hispanic artists of diverse countries, centuries and artistic styles.
- Use in oral and written sentences exceptional irregular conjugations in the present tense indicative mood.
- Establish the differences in forms and meanings between common irregular verbs and not so common irregular verbs in the present tense indicative mood.
- Recognize sentences in the Conditional Tense.
- Create oral and written sentences using the Conditional Tense.
- Compare two or more elements sing adjectives, nouns, verbs or adverbs in oral and written sentences.
- Interpret sentences in the present, imperfect, and perfect tenses in the Subjunctive.
- Create oral and written sentences using the present, imperfect, and perfect tenses in the Subjunctive.
- Identify the differences between the Indicative and the Subjunctive Mood.
- Understand the forms and meanings of Spanish conjunctions and prepositions.
- Use Spanish prepositions and conjunctions in oral and written expressions.
- Recognize the difference between the passive voice and the active voice.
- Change sentences from the active vice to the passive voice.
- Properly use comma, semicolon, periods, etc.
- Differentiate the use of reflexive constructions in their literal meanings and as the equivalent of “each other”.
- Interpret and formulate commands using verbs with orthographic changes.
- Recognize verbs with irregular present participles forms.
- Use irregular participles forms in both oral and written forms.
- Formulate sentences using present participles as adverbs.
- Differentiate the preterit and the imperfect tenses based on their meanings.

- Recognize the meanings of idiomatic expressions.
- Use idiomatic expressions in both oral and written forms.
- Differentiate the use of the future tense in its literal meaning and in sentences in the present.
- Interpret sentences using the future perfect tense.
- Formulate sentences using the future tense in both oral and written forms.
- Interpret sentences using the conditional perfect tense.
- Formulate sentences using the conditional perfect tenses in both oral and written forms.
- Distinguish the change in meaning in a given word according to the added prefix or suffix.
- Properly use close conjunctions such as “mas”, “pero” and “sino” in both oral and written forms.
- Recognize pronouns as objects of a preposition.
- Use pronouns as objects of a preposition in both oral and written forms.
- Properly use relative pronouns in both oral and written forms.
- Differentiate the forms and uses of ordinal and cardinal numbers.
- Use ordinal numbers in both oral and written forms.

SPA 18 – Proper Models of Spanish Grammar and Conversation for Native Speakers

Students will be able to:

- Recognize the differences and similarities among the Hispanic nations and communities based on geographic locations, historical developments, and ethnic compositions.
- Avoid repetitions and enhance oral and written expressions using Spanish synonyms, words as well as phrases.
- Properly use monolingual dictionaries (Spanish).
- Discuss the difference and similarities between synonyms and definitions.
- Write simple essays based on the traditional division of Introduction, Development, and Conclusion.
- Connect the sentences in a paragraph using the proper connectors according to the goal of the different parts of an essay.
- Understand the different phases of development that led to the formation of the Spanish language as historical steps conditioned by linguistic and extra-linguistic issues alike.
- Recognize English/Spanish near cognates words.
- Properly use Spanish forms of English/Spanish cognates with simple letters instead of double letters.
- Avoid meaningless calcus from English to Spanish in order to reduce misunderstandings with native speakers not exposed to the English language.
- Recognize the diphthong and other Spanish vowels combinations in syllables.
- Properly divide in syllables any Spanish word.
- Distinguish the change in meaning in a given word according to the added prefix or suffix.

- Analyze any Spanish word according to its etymological classification.
- Identify the “tonic syllable” of any Spanish word based on the word’s phonetic pronunciation.
- Differentiate Spanish words according to the location of the “tonic syllable”.
- Properly use the Spanish written accents in polysyllables as well as monosyllables words.
- Create derived words from adjectives to nouns and vice versa as well as with the use of prefixes and suffixes.
- Properly write homophonic words based on their meanings.
- Identify verbs with two past participles forms.
- Use the past participle corresponding form (regular or irregular) according to the context.
- Discuss Spanish idioms and sayings or proverbs.
- Compare Spanish and English idioms and sayings or proverbs.
- Understand and use direct and impersonal commands according to the context.
- Properly use Spanish punctuation marks.
- Select the proper Spanish equivalences of English compound adjectives.
- Use the relative pronouns the way they are supposed to in both oral and written forms.
- Use specific adverbial phrases according to the context.
- Distinguish the proper equivalency of certain English prepositions according to the context.
- Compare the use of pero, sino, and sino que as the Spanish equivalencies of but.
- Distinguish the most common Spanish abbreviations from their original words.
- Differentiate the meanings and uses of the most common Spanish interjections.
- Understand and use compound words with different meanings if written as single words or separated in their original elements.

F - Yiddish

YD 30 – Yiddish Literature in Translation

- Students will recognize and have a general knowledge and appreciation for the contributions of modern Yiddish writers, from the inception of Modern Yiddish Literature in the second half of the nineteenth century until the present time.
- Students will be able to determine the point of view, values, or intent of instructive material. They will understand the ideologies inherent in the various genres of Yiddish literature and gain an understanding and appreciation for differences in cultures.
- Students will distinguish between Early Yiddish Literature and Modern Yiddish Literature; Recognize the antagonism of the Haskalah towards Yiddish; Recognize the development of Modern Yiddish literature as a utilitarian vehicle to “enlighten” the masses; Realize the contributions of Hasidism towards the validation of Yiddish.
- Students will be able to analyze and interpret representative writings of Modern Yiddish literary personalities, especially the “classical trio,” the three founding

fathers of Modern Yiddish Literature: Mendele Mokher Segarim (Shalom Yaakov Abramovitsh; 1836-1917), Shalom Aleichem (Shalom Rabinovitshl 1859-1916), and L.I. Peretz (1852-1915), also to explore later writers: Shneour, Pinski, Isaac Bashevis Singer, Reisen, Anski.

- Students will gain knowledge of the major trends that contributed towards the development of Modern Yiddish literature (Haskalah, Hasidism, Socialism, Anti-Semitism), and which, in turn, generated Yiddish cinema. Students will compare the film, "Tevye der Milkhiger" to the literary work from which it derived.
- Students will analyze, critique, and explore works that chronicled the cultural heritage of the shtetl and that described the socioeconomic conditions of Jewish immigrants, especially the realism and horror of the sweatshops and difficulties of maintaining one's Jewish identity.
- Students will analyze and address the themes of recognized lyrics, as Rozhinkes Mit Mandlen (Raisins and Almonds, Goldfaden), Oyfen Pripichik (At the Fireplace, Warshawsky), Yankele (Gebertig), Belz (Jacobs), A Letter to Mother (Shmulewitz), My Little Boy (Rosenfeld).
- The students will be able to articulate and argue his positions; to develop his own thoughts and perspectives on the reading material, to formulate and understand his own values and to become aware of others' values; to make informed, intelligent values decisions.
- Students will be able to interpret instructive material; to summarize information accurately; to reduce information into meaningful components for analysis; to perceive and create logical coherence and discernible themes and patterns across different bodies of information.
- To gain intellectual flexibility and to be open to new ideas and information.
- To understand and be sensitive to the range of political, religious, and cultural realities pervading our society.
- To relate the subject matter to their personal lives.
- To react personally to the literature read.
- To correlate, synthesize, and integrate the diversity of information and ideas.

VIII – Health, Physical Education and Recreation

A – Health Education

HPE 12 – Foundations of Health and Physical Education

- Students will describe and explain the six dimensions of wellness that promote a healthy lifestyle.
- Students will identify the major goals of the national Healthy People initiative.
- Students will discuss health issues for diverse populations.
- Students will explain how to create a behavior management plan to change negative lifestyles.
- Students will learn how to assess the significance of thinking critically on health issues.
- Students will define stress and describe its effects on their lives.
- Students will discuss the relationship between stress and disease.
- Students will identify the common sources of stress.
- Students will describe and explain the coping strategies and time management techniques to prevent stress.
- Students will design a personal stress management plan.
- Students will define and explain what it means to be psychologically healthy.
- Students will identify psychological disorders and warning signs of suicide.
- Students will discuss the significance of getting professional help to deal with psychological problems.
- Students will describe and explain the negative effects of overusing defense mechanisms.
- Students will understand the significance of developing a positive attitude and healthy self-esteem.
- Students will be able to describe the components of physical fitness.
- Students will be able to describe the health benefits of regular physical activity.
- Students will be able to list the different forms of cardio-respiratory activities and describe their potential health benefits and risks.
- Students will be able to explain the benefits of a muscle training program and describe the different types of stretching exercises.
- Students will be able to list safety strategies for physically active individuals.
- Students will be able to list the basic nutrients necessary for a healthy body and describe their functions.
- Students will be able to describe the Food Guide Pyramid and explain its significance.
- Students will be able to explain current recommendations for food portions and servings.
- Students will be able to discuss the purpose of the Dietary Reference Intakes and explain how to interpret the nutritional information provided on the food labels.
- Students will be able to compare the advantages and disadvantages of various alternative diets and ethnic foods.

- Students will be able to list the food safety hazards and describe prevention measures.
- Students will be able to define body mass index (BMI) and describe the different methods of estimating body mass.
- Students will be able to identify several factors that influence food consumption.
- Students will be able to identify and describe the symptoms and dangers associated with eating disorders.
- Students will be able to define obesity and describe its relationship to genetics, lifestyle and major health problems.
- Students will be able to assess various approaches to weight loss.
- Students will be able to design a personal plan for sensible weight management.
- Students will be able to describe the role of communication in the forming and maintaining of relationships, comparing and contrasting the expectations and behaviors required for friendship, dating and intimate relationships.
- Students will be able to identify issues that are likely to affect a long term relationship, and the prevention strategies.
- Students will be able to describe the male and female reproductive system, their structure and function.
- Students will be able to recognize and explain the sexual health related behaviors that can affect males and females.
- Students will be able to relate sexual orientation and diversity to sexual behaviors practiced by some adults.
- Students will be able to explain the process of human conception.
- Students will be able to identify contraceptive options, explaining the advantages and risk of each method.
- Define abortion and identify the available methods.
- Identify the reasons for pre-conceptual and prenatal care.
- Describe the process of pregnancy, childbirth and the post partum period.
- List the common infectious disease of the 21st century, disease agents, and how they are spread.
- Describe bodily protective mechanisms against infectious disease transmission steps.
- Identify sexually transmitted diseases, transmission steps, symptoms and treatments for each.
- List the methods of HIV infection.
- Explain prevention methods for STDs including HIV.
- Identify and discuss major lifestyle disorders of today. Contrast them to those of the past and account for differences.
- Identify and explain the risk factors for cardiovascular diseases that are possible for an individual to control and those that are not.
- List and explain the warning signs of cancer.
- Discuss the common forms of cancer, risk factors, prevention, detection, and treatment.
- List risk factors for cancer and methods to reduce the risk.

HPE 12 – Foundations of Health and Physical Education – Example 2

- Students will relate various disciplines (e.g. consumerism, psychology, sociology, and biology) to the study of health.
- Students will distinguish the interrelationship between physical, psychological, social, spiritual, intellectual….
- Students will identify factors influencing psychosocial health and develop strategies to enhance mental, emotional, social and spiritual wellness.
- Students will research, design, and implement nutrition and fitness programs proven effective in weight management and disease prevention.
- Students will assess the characteristics of effective communication, positive relationships and healthy sexuality.
- Students will apply critical thinking skills to deduce informed decisions as they pertain to drug use, misuse and abuse.
- Students will evaluate health behaviors and risk factors of infectious and major diseases to formulate options that aid in the reduction of health risks and the maintenance of positive lifestyle behaviors.
- Students will examine the long and short term impact of human activity on global environmental health and strategize ways to improve the planet's livability and sustainability.
- Students will analyze and interpret data based on health-related statistics through the use of charts, graphs, and tables.
- Students will analyze the causes of particular health-related issues (e.g. chronic and communicable diseases), assess the impact of positive and negative consequences based on choice, hone decision-making skills, and design & apply positive health interventions to real life situations.
- Students will collaboratively work together to examine health-related issues (e.g. global health) from various perspectives, propose alternative solutions or acknowledge existing healthy behaviors. Students will synthesize the acquired information, formulate a written assignment and orally present the information to each other and to the class.
- Students will research health topics using credible authoritative internet sites and library databases. Students will use technology to synthesize health research for written and oral presentation.

PEW 7 – Power Volleyball

- The student will become acquainted with basic volleyball terminology.
- The student will acquire advanced volleyball skills such as, receiving, passing, setting, serving, blocking the ball.
- The student will demonstrate her ability to execute the following: two types of serving, above the face passing, forearm pass, modified dink, back passing, successful attempt at blocking.
- The student will develop her agility, which is essential in power volleyball, and take a pre and post vertical jump test.

RPE 40 – Sport and American Society

- Students will be able to describe and explain how sociology can be used to explain the meaning of sports in society.
- Students will be able to explain the interrelationship of sports, culture, society, and identify future trends in sports.
- Students will be able to identify and describe concepts and theories used in sociology to study sports.
- Students will be able to discuss the significance of sports in societies throughout history.
- Students will be able to describe and discuss gender, race, and social class issues in terms of sports and society.
- Students will be able to understand how sports are interrelated to business, economics, and media.
- Students will be able to describe the different perspectives between the sociologist who studies sports and sports psychologist.
- Students will be able to explain social phenomena, institutionalized activities, contested activities, and social constructions in terms of sports.
- Students will learn about sports ideologies as related to gender, race, and social class.
- Students will identify and explain the traditional definition of sports.
- Students will identify and discuss the professional journals and organizations in sports sociology.
- Students will be able to explain and discuss the six theories of functionalist, conflict, interactionist, critical, feminist, and figurational as they relate to society and sports.
- Students will be able to understand how each one of the six theories applies when studying sports in everyday life.
- Students will be able to identify and discuss the strengths and weaknesses of each of the six theories.
- Students will learn that sports are more than just reflections of society but have a more in-depth meaning.
- Students will be able to explain and describe which theories can be used individually and collectively to do research on sports as related to school, community, and society.
- Students will have an understanding of the role of sports throughout different periods in history inclusive of Greeks, Romans, Medieval Europe, Renaissance, Reformation, Enlightenment, Industrial Revolution to the present day in the United States.
- Students will be able to explain and discuss how sports were/are defined, organized, played and sponsored throughout history.
- Students will be able to explain the major differences of sports forms and characteristics from the past to contemporary organized competitive global sports of the present.
- Students will be able to describe the major changes in sports during the industrial revolution that lead to commercialization of sports today.

- Students will be able to identify the major issues and problems in sports of the 21st Century.
- Students will be able to describe and discuss the different valuable experiences of informal and formal sports.
- Students will be able to explain what is meant by the performance ethic, winning at all costs, and whether organized youth sports are taken too seriously by parents and coaches.
- Students will be able to identify when children are developmentally ready for organized sports and when burnout can occur.
- Students will be able to describe and discuss the value of alternative sports versus power performance sports.
- Students will be able to explain the sociological issues of why families are connected to sports and discuss how to make youth sports programs more fun.
- Students will be able to define and discuss what negative and positive deviance means in sports.
- Students will be able to identify and describe under-conformity and over-conformity to the rules of various sports and its negative effects on athletes on the long-term.
- Students will list and discuss strategies that will help prevent negative and positive deviance in sports among athletes and coaches.
- Students will learn about the sport ethic, burnout in sports, and the long term psychological and physical effects on athletes who abuse themselves while playing sports.
- Students will be able to identify and describe the long-term negative health effects of athletes using supplements and performance enhancing drugs in sports.
- Students will be able to define and discuss the major legal ramifications of gender equity as espoused in Title IX.
- Students will be able to identify and implement effective strategies to promote gender equity in sports in the various school levels and community organizations.
- Students will be able to identify and describe strategies to change gender ideology and cultural views to achieve gender equity in sports.
- Students will be able to describe and discuss the effects of Title IX on sports participation in terms of proportionality, coaching and administrative positions for men and women.
- Students will be able to identify and discuss the major sports challenges faced today among the disabled, gays, lesbians and diverse populations.
- Students will be able to identify the economic factors in a society that affect the globalization and commercialization of sports.
- Students will be able to describe and discuss the effects of corporate branding on professional and amateur sports in society and around the world.
- Students will be able to explain how owners and sponsors have benefitted from the commercialization of sports in their endeavors to establish sports business monopolies.
- Students will be able to identify major sources of income for owners of professional sports in society and globally.

- Students will be able to identify major sources of public assistance for owners of professional sports in American society.
- Students will be able to describe and discuss how sports and the media depend on each other for commercial and business success.
- Students will be able to identify the characteristic effects of the visual media, including internet, video games, virtual sports, and television.
- Students will be able to describe and discuss how the media constructs sports in terms of images, narratives and underlying ideological themes.
- Students will be able to critically assess the significant relationship between sports and media coverage effects of newspapers, magazines, television, and radio.
- Students will be able to identify and discuss the advantages and disadvantages of interscholastic and intercollegiate sports.
- Students will be able to identify and describe the advantages and disadvantages of big-time intercollegiate sports to school programs.
- Students will be able to describe and discuss the effects of big-time intercollegiate sports on academics, grades and graduation rates among men and women.
- Students will be able to identify the problems of high school and collegiate sports and discuss recommendations for change.
- Students will be able to identify and describe the negative and positive academic effects of entertainment and commercialization on intercollegiate programs.
- Students will be able to explain why power and performance sports as well as pleasure and participation sports will grow in the future.
- Students will be able to identify and discuss trends of sports in terms of race and gender equity, globalization of men's and women's sports.
- Students will be able to describe and discuss the major future sports trends in such areas as professional sports, intercollegiate and high school sports, youth sports, involvement of spectators in sports, technological and media effects.
- Students will be able to explain how rationalization, commercialism, and consumerism will affect future trends in sports.
- Students will be able to describe the different ways to change sports in terms of conservative, reformist, and radical approaches.

RPE 12 – Leadership and Recreation and Physical Education

- Students will be able to define and describe leadership and followership and how they are related.
- Students will be able to identify and discuss leadership traits and qualities including integrity, positive mental attitude, creativity, courage and responsibility.
- Students will be able to explain and discuss leader competencies/skills inclusive of conceptual, interpersonal, and technical.
- Students will be able to describe and discuss administrative, supervisory, and direct leadership layers.
- Students will be able to explain how leaders are selected and identified and how power can be abused.

- Students will be able to define and discuss trait, attribution, great man, and behavioral theories.
- Students will be able to identify and describe leadership styles including autocratic, democratic, and laissez-faire.
- Students will be able to explain and discuss situational and contingency theories of leadership as well as managerial grids.
- Students will be able to identify and explain contemporary views of leadership as well as managerial grids.
- Students will be able to identify and explain contemporary views of leadership including transactional, transformational, and servant.
- Students will be able to describe and discuss individual and collective cultural perspectives on leadership.
- Students will be able to identify and discuss elements and structure of groups in terms of shared goals, cohesion, decision making, and conflicts.
- Students will be able to explain and describe leadership behavioral styles of director, socializer, relater, and thinker.
- Students will be able to describe and discuss effective and ineffective qualities of behavior in groups.
- Students will be able to list and describe positive and negative group roles.
- Students will be able to list and discuss positive team building qualities.
- Students will be able to define and describe models of effective means of communication.
- Students will be able to describe and discuss functions of communications inclusive of persuasion/influence, information sharing, social/expressive, command/instruct, and conflict resolution.
- Students will be able to explain and discuss effective ways to communicate and barriers to communication.
- Students will be able to describe and discuss effective verbal language in terms of listening, attending skills, following skills, and reflecting skills.
- Students will be able to identify and describe verbal communications in terms of ethic, racist, gender, and sexist means of communication.
- Students will be able to explain and describe reasons and sources of conflicts in terms of distributions of resources, individual and psychological needs, and value differences.
- Students will be able to describe and discuss factors that influence conflict intensity inclusive of avoidance, accommodation, competition, compromise, and collaboration.
- Students will be able to list and explain guidelines for constructive management of difficulties and describe the Seven-Phase Model of Managing Difficulties.
- Students will be able to explain and discuss assertiveness in managing difficulties in terms of aggressive and passive behaviors as well as manipulative and assertive behaviors.
- Students will be able to explain and describe the mediation process of set the tone, define and discuss the conflict, summarize progress, explore alternative solutions, and set a time for follow-up.

- Students will be able to describe and discuss approaches to behavior management including preventive, moral, and social skills training.
- Students will be able to list and explain purposes and factors affecting behavior management such as developmental ability, age, health, gender, and cultural background.
- Students will be able to list and discuss principles of behavior management in terms of agency process, being proactive, being prepared, handling situations, consistency, target behaviors, and avoiding power struggles.
- Students will be able to identify and discuss behavior management techniques in terms of unobtrusive or preventive, discernible, and obtrusive techniques.
- Students will be able to describe and discuss appropriate motivating behavior techniques in terms of Maslow's hierarchy of needs and McClelland's view of motivation.
- Students will identify the role of values and ethics and use them as guides in physical education and recreation.
- Students will describe and discuss foundational values including perceptions of ethics, positive social values, ethical decision making, and the decision making process.
- Students will be able to explain and discuss the ethic of care in physical education and recreation.
- Students will be able to describe and discuss the rights and justice position of ethics.
- Students will be able to define and describe the significance of values and ethics in their lives.
- Students will learn about tort law and the four elements of negligence inclusive of duty, act/standard of care, proximate cause, and injury/damage.
- Students will be able to list and explain negligent acts of omission and commission of duty as well as malfeasance, misfeasance, and nonfeasance.
- Students will identify and explain types of supervision including specific, general and transitional, and devise a supervision plan for activities.
- Students will be able to identify and describe contact of the activity or teaching in terms of knowledge of participants, activity, and environment.
- Students will be able to list and explain types of risk management forms used in physical education and recreation activities including parental permission, medical history, accident/incident report, assumption of risk/agreement to participant, and release/waiver.
- Students will be able to identify and explain the preparation phase of teaching including group composition, risk management, goals and objectives.
- Students will be able to describe and discuss priming the group phase including getting the group's attention, dividing the group in various ways, and learning participant names through icebreakers.
- Students will be able to explain and discuss the delivery phase of teaching including introducing the activity, demonstrating, proper progression, teachable moments, transitions, and summary.
- Students will be able to describe and discuss how to run a formal and informal meeting by the "Robert's Rules of Order" book.

- Students will be able to list and explain how to conduct a formal meeting including notifying participants, minutes, financial report, motions, setting an agenda, and following proper procedures in running a meeting.
- Students will be able to identify social issues impacting physical education and recreation in terms of child and adult abuse.
- Students will be able to recognize child and adult abuse in terms of physical, emotional, sexual and neglect, as well as prevention.
- Students will be able to identify and discuss the nature of professional organizations in the physical education and recreation such as the American Alliance in Health, Physical Education, Recreation, and Dance (AAHPERD), American Association of Leisure and Recreation (AALR) and the National Recreation and Park Association (NRPA).
- Students will be able to identify and learn about certification criteria and standards in organizations such as Certified Therapeutic Recreation Specialist (CTRS) and Youth Sports Programs.
- Students will become aware of first-aid and safety education in the physical education and recreation professions.

PEC 11 – Beginning Tennis

- Students will learn the rules and basic strategies of the game of tennis and develop an understanding of how a lifetime sport will promote fitness and cardio-vascular respiratory fitness.
- Students will learn the following: ready position, tennis grip, tennis footwork, forehand stroke, backhand stroke, forehand volley, backhand volley, serve, rallying.
- Students will be able to play the game of tennis, know the rules of play, how to keep score, tennis etiquette and be able to watch and understand the rules and the outcome of the game.
- Students will learn where to hit the ball in a tennis rally, how to move an opponent, how to open up the tennis court, where to stand, where to serve, where to return serves and the best offensive and defensive strategies.
- Students will learn the skills and knowledge of the rules of the game of tennis, be able to compete in tennis tournaments and enjoy watching tennis matches.

PEC 44 – Tennis 2

- Students will demonstrate the correct ready position.
- Students will demonstrate the correct forehand position.
- Students will demonstrate the correct forehand stroke.
- Students will demonstrate the correct backhand grip.
- Students will learn the correct backhand stroke.
- Students will demonstrate the ability to hit forehand and backhand strokes from different areas on the court.
- Students will demonstrate an ability to rally i.e. hit continuous forehand and backhand strokes and keep the ball on the court.

- Students will demonstrate an ability to rally i.e. hit continuous forehand and backhand strokes and keep the ball on the court.
- Students will demonstrate a proper serve, including, stance, grip, swing, hit and follow through.
- Students will demonstrate 1st and 2nd serves with an ability to place them in the serving box with speed on the first serve and accuracy on the second serve.
- Students will demonstrate the correct fundamentals of the volley including grip, stance and stroke on the forehand and on the backhand side.
- Students will demonstrate an ability to hit volleys at the net and from the mid-court position.
- Students will demonstrate an ability to play a tennis match in singles and doubles competition indicating knowledge of scoring, rules of play, rotation of players and tennis etiquette.
- Students will learn socialization skills through working and playing tennis with different class members.
- Students will be able to watch, understand and enjoy tennis matches.

PEC 17 – Basic Volleyball

- Students will become acquainted with volleyball terminology, rules, and scoring as stated in the latest volleyball rule book.
- Students will become acquainted with volleyball stretches and warm-ups.
- Students will learn and be able to demonstrate the basic volleyball skills of bumping, passing, setting, spiking, blocking, serving, dinking, and digging.
- Students will learn about the history of volleyball and understand the value of volleyball as a lifetime sport.
- Students will learn about the flexibility, physical and mental requirements of playing recreational coed volleyball.
- Students will be able to understand and describe the basic components of all the volleyball skills.
- Students will be able to describe and discuss offensive and defensive systems and strategy.

SAC 08201 – Gambling: Treatment and Prevention in Substance Abuse Counseling

By the end of the semester, students will be able to:

- State at least 3 requirements/expectations to complete the course.
- Describe what gambling means in at least 1 paragraph.
- Identify at least 3 sources of academic research on gambling.
- Describe at least 3 historical factors that led to gambling's growth.
- Compare at least 3 types of gambling then and now.
- Identify at least 3 epidemiological risk factors for gambling.
- Describe the main points of at least 3 theoretical frameworks for explaining gambling.
- Compare how at least 2 theories assess gambling risk.

- Apply at least 2 theories to assess gambling risk given a specific profile (vignette).
- Match the warning signs that indicate the onset and continuation of gambling with at least 2 developmental stages.
- Describe any 4 similarities between AOD use and gambling disorders.
- Identify the characteristics of the 3 levels of gambling.
- Match the gambling subtypes to the 3 levels of gambling.
- Correctly assess the indicators of compulsive gambling in 2 or 3 vignettes.
- Identify the critical elements in a psychosocial assessment for a client with this disorder.
- Develop an appropriate long term, short term goal and behavioral objective/s in at least 3 prioritized needs areas.
- Compare the pros/cons of at least 3 available types of treatment.
- Discuss 3 sources of available self-help and how they can be integrated.
- Match at least 3 relapse prevention strategies with identified triggers.
- Identify at least 4 of the steps that must be followed to formulate an effective discharge plan.
- Develop an integrated discharge/relapse prevention plan using at least 1 vignette.
- Use any 3 models to assess the impact of gambling on the family.
- Compare at least 3 family treatment approaches that can be used with gambling clients.
- Match at least 4 of the steps that must be followed to formulate an effective family education/prevention plan.
- Name at least 3 groups of prevention/education strategies.
- Match at least 4 prevention/education strategies to an appropriate target group.
- Develop an education/prevention plan for an identified target group.

IX – History, Philosophy and Political Sciences

A – History

HIS 12 – American Civilization II

- The student will achieve a deeper insight into the American experience, past, present and future.
- Through the intensive study of the events and individuals that comprise the history of the United States of America, undergraduates will develop a sense of perspective and a broader frame of reference for their own individual and collective histories.
- The knowledge students acquire in our learning environment will provide them with the necessary intellectual and cultural background to define for themselves what it means and has meant to be American.
- The course acquaints students with many of the core concepts, theories, and methodologies essential to academic and cultural literacy.
- Through emphasis on reading and interpreting texts, comparative conceptual analysis, the explication of graphic charts and illustrations, and communicating clearly and effectively through writing, the course develops and enhances student skills in the areas of critical thinking, reading comprehension, and both oral and written communication.

HIS 21 – Popular Culture in America

- A primary objective of the course is for the student to achieve a deeper insight into the American experience, past, present, and future, as viewed through its popular culture forms and content.
- Through intensive study of those who shaped, produced, and consumed popular culture, undergraduates will develop a sense of perspective and a broader frame of reference for their own individual and collective histories.
- The knowledge students acquire in our learning environment will provide them with the necessary intellectual and cultural background to define for themselves what it means and has meant to be American.
- The course acquaints students with many of the core concepts, theories, and methodologies essential to academic and cultural literacy.
- Through emphasis on reading and interpreting texts, comparative conceptual analysis, the explication of graphic charts and illustrations, and communicating clearly and effectively through writing, the course develops and enhances student skills in the areas of critical thinking, reading comprehension, and both oral and written communication.

HIS 50 – Black American History

- A primary objective of the course is for the student to achieve a deeper insight into the African American experience, past, present, and future.
- Through intensive study of the events and individuals that comprise black history in the United States of America, undergraduates will develop a sense of perspective and a broader frame of reference for their own individual and collective histories.
- The knowledge students acquire in our learning environment will provide them with the necessary intellectual and cultural background to define for themselves what it means and has meant to be African-American.
- The course acquaints students with many of the core concepts, theories, and methodologies essential to academic and cultural literacy.
- Through emphasis on reading and interpreting texts, comparative conceptual analysis, the explication of graphic charts and illustrations, and communicating clearly and effectively through writing, the course develops and enhances student skills in the areas of critical thinking, reading comprehension, and both oral and written communication.

HIS 51 – The Ancient World

- To instill in the student an appreciation of history through the study of diverse cultures and different paths of development in world civilizations.
- To make the students aware of recurring themes in society from the ancient to the present.
- To develop in the student an understanding of the historical, social and economic forces that shaped the modern world.
- To develop in the student the ability to communicate and analyze information related to history.
- To enable the student to recognize and value culturally-diverse historical perspectives.
- To aid the student in acquiring a deeper insight and a balanced understanding of the global world.
- To develop in the student the ability to articulate both in oral and written form the material in question.
- To expose students to current events in magazines, newspapers and journals on topics related to different parts of the world.
- To develop in the student confidence in handling issues previously considered as remote or alien.
- To enable the student to communicate effectively, orally and in writing about historical topics.
- To acquaint the student about the wealth of research resources on the internet.
- To enable the student to develop an appreciation of the subject so that the student can pursue further study either as a vocation or as a serious avocation.

HIS 59 – Modern America: 1920 to the Present

- Read and comprehend primary source texts.
- Identify and understand key vocabulary terms used within the discipline.
- Identify and analyze historical problems from a variety of viewpoints.
- Explain and defend historical arguments.
- Write clearly, critically, and effectively.
- Develop and use research skills.
- Use a variety of learning strategies including traditional lectures, oral presentation, collaborative learning, and/or computer-assisted learning (in certain hybrid-online sections).

HIS 64 – Modern Jewish History

- To understand the broad range of lifestyles in contemporary Jewish communities, and how this diversity came about in the past three centuries.
- Examine ideologies in the modern era and understand how they impacted upon Jewish life and values.
- To examine the struggle for Jewish emancipation, its benefits as well as its negative aspects.
- To enable students to understand the various religious movements as responses to Emancipation and the desire to find a niche in the world.
- To examine anti-Semitism in the modern era and understand the phenomenon as a continuum since ancient times.
- To acquaint students with the experiences of Jews in the United States and their contribution to our culture.
- To examine the causes for the rise of the Zionist ideology and movement; the challenge of “dual-loyalties”, and the establishment of the state of Israel.

HIS 67 – Post-Biblical Jewish History

- Analyze the variety of political, social, and cultural institutions developed by Jews during different periods of their history.
- Develop awareness of transformation of Jewish society from a localized, self-ruling agricultural community to far-flung urban centers.
- Demonstrate the influence of foreign civilizations on Jewish mentality and institutions.
- Understand the rise of Christianity within the Jewish polity and reasons for the schism between the two faiths.
- Discern and analyze recurrent phenomena such as anti-Semitism and evaluate the responses to it.
- Understand the relationship between Jews in their homeland and those in the Diaspora.
- Familiarity with the literature developed during this period – Talmud, Apocrypha, Responsa, philosophy, Rabbinic commentary.
- Understand the reasons for differences among Diaspora societies.

B – Philosophy

PHI 71 – History of Philosophy: The Classical Philosophers
PHI 72 – History of Philosophy: The Modern Philosophers
PHI 77 – Philosophy of Religion

As a result of taking this course, students will learn or be able to do the following:

- Read and comprehend primary and secondary source texts.
- Identify and understand key vocabulary terms.
- Identify and analyze arguments.
- Explain and defend their positions on philosophical issues.
- Write clearly, critically, and effectively.

C – Political Science

POL 50 – Introduction to Political Theory

- Students should be able to write a term paper that develops an opinion about a political idea in its historical context.
- Students need to display an understanding of the multiple possible interpretation of an idea.
- They must demonstrate a close reading of the text and good use of quotations.
- Students will show their understanding of the tradition and develop their own views in responding to short questions and essay questions in a midterm and final exam.
- Students need to articulate their views and knowledge in class discussion.

POL 51 – American Government and Politics

- Students will learn to understand the operations of government, thereby becoming informed citizens and participants in our Democratic system of government which is vital for maintaining a strong Democracy.
- Students will have the tools necessary to become active and informed participants in their community and government by understanding the significance of the vote, attending Community Boards, writing letters to government officials and lobbying government officers.
- Students will be informed about the role of interest groups and political parties and how one may interact with them.
- Students will be familiarized with the Constitution of the United States and with their constitutional rights.

- Students will understand the significant differences between state, local, and national government.

POL 53 – State and Local Government

- Students should contribute to class discussion on all matters of the course.
- They should be able to write a term paper on the issue of welfare or health care in terms of contemporary ideological debate as well as debate about federalism, such as which level of government should have more responsibility for these social programs.
- Students should also be able to demonstrate, in a mid-term and final exam, knowledge of basic facts about the American political system and issues of federalism, state and local governance. In these exams, students should also develop their opinions about the course material, including contemporary ideologies.

POL 54 – The American Presidency

- Students should be able to write a term paper that identifies the place of the Presidency in the political system and identify its strengths and weaknesses.
- Students must be able, in a mid-term and final exam, identify basic facts about the American political system, changes in the Presidency and develop their own view about the Presidency and its role in the political system.
- Students need to develop their own ideology and relate contemporary ideologies to debates about the Presidency.

POL 56 – City Politics

- Students should demonstrate knowledge of the political development of cities by analyzing a particular period of time and placing it in context of overall political history of cities.
- Students must both demonstrate knowledge of these topics, as well as develop their own opinions about them.
- In a mid-term and final exam, students need to display a basic understanding of relevant facts of city politics and be able to respond to short answer questions and essay questions in which they can formulate their opinion about a variety of issues.

POL 58 – Environmental Politics

Students will be able to understand:

- The nature of environmental problems and their causes.
- The environmental laws and policies of the U.S. government and the states.
- The relevant policy solutions and alternatives.

- The roles played by political parties and interest groups in the formulation of environmental laws and policies.
- How U.S. environmental standards are set domestically and by treaty agreements.

POL 63 – Introduction to Criminal Justice

Students will be able to understand:

- The elements of a crime.
- Why people commit crime.
- Police functions, rules and organization.
- The history of policing in the United States.
- The role of the courts and the rights of the accused.
- The distinction between legal and illegal police methods and prosecutorial procedures.
- The roles played by police, judges, prosecutors, defense attorneys, juries, and corrections officers.
- The difference between violations, misdemeanors and felonies, and the corresponding fines, jail and prison sentences.

POL 67 – The American Legal System

As a result of taking this course, students will learn or be able to do the following:

- Read and comprehend primary and secondary legal texts.
- Identify and understand key legal terms.
- Identify and analyze legal arguments.
- Explain and defend their positions on legal issues.
- Write clearly, critically, and effectively.

X – Mathematics and Computer Science

A – Computer Information Systems

CIS 11 – Microcomputer Applications

Students will have the ability to:

- Discuss the history of computing.
- Identify issues associated with the protection of data storage and data transmission.
- Describe the basic computer hardware organization; the operations of computer components (including bus and memory) in the context of the instruction fetch and execute cycle; and how I/O modules interact with the rest of the computer system.
- Describe the relationship between different base numbering systems and conversion techniques; describe different data formats such as numeric, alphanumeric, sound and image.
- Describe the basic computer software, including operating system software (interoperability, standalone, network, and multi-user) and application software.
- Demonstrate proficiency in the use of office productivity knowledge work software (word processing, spreadsheet, database, email, web browser, and presentation software).
- Demonstrate proficiency in using Windows operating system tools.
- Conduct web-based research; demonstrate proficiency with online documentation and help files.

CIS 12 – Introduction to Operating Systems

Students will be able to:

- Have a more complete understanding of how computers and operating systems work.
- Gain an understanding of future hardware and software trends in the industry.
- They will learn how to keep their own computers and any business computers running at peak efficiency and how to identify and/or prevent malfunctions due to hardware and/or software “problems”.

CIS 15 – Applied Computer Architecture

Students will be able to:

- Take CompTIA’s A+ exam.
- Understand the software and hardware topics covered by the exam which will give them a more complete understanding of how computers and operating systems work.
- Identify, resolve and/or prevent malfunctions due to hardware and/or software “problems”.

CIS 21 – Introduction to Web Page Development

- Students will have the ability to use the Front Page software to create Web pages with the following features: Text with a variety of font styles, attributes, and colors; hypertext links; a variety of table styles including spanning row and columns; frames including frame nesting; include pictures that may serve as entire links or be used as hotspots.
- A variety of table styles including spanning row and columns; frames including frame nesting.
- Include pictures that may serve as entire links or be used as hotspots.
- Identify portions of a page through its HTML code and make minor modifications to the code.
- Identify the important features needed for good web page design.
- Explain the concept of a plug-in and why it is needed in web pages.

CIS 22 – HTML Authoring and Javascript

Students will have the ability to create Web pages using the following features:

- Text with a variety of font styles, attributes, and colors.
- Hypertext links.
- A variety of table styles including spanning row and columns.
- Frames including frame nesting.
- Include pictures that may serve as entire links or be used as hotspots.
- Troubleshoot HTML code.
- Use cascading style sheets in defining Web Pages.
- Introduce Javascript within the page to afford dynamic information within the page.
- Explain the relationship of databases and e-commerce to web page design.

CIS 31 – Introduction to Database

Students will learn to use a database system to:

- Create and manage data using basic database structures.
- Organize data into tables, forms and reports.
- Query databases to extract selective information.
- This will prepare students for a more advanced database course and, for those that prefer to go into business, for the business, computing market where it is widely used.

CIS 32 – dBase Programming

Students will learn to:

- Recognize the connection between computer programming languages and dbase languages.
- Develop and write a full menu-driven program.

- Study various applications of database systems for data organization.

CIS 41 – Novell 1

- The purpose of this course is to introduce students to the fundamental concepts, structures and components of a LAN.
- Students will be able to select the hardware-network interface cards, servers, cabling system, workstations that are necessary for setting up a network. Actual installations of a network will be done in the lab.

CIS 42 – Novell 2

- This course will build on concepts of the first Network Administration course, DP 70.
- Students will learn in greater detail about configuration of files, protocol support, network optimization and client management.

CIS 45 – Network Server Administration

Students will become knowledgeable in the fundamental concepts, structures and components of a Local Area Network which include:

- Installing Windows 2000 Server.
- Installing and configuring, and trouble shooting access to resources.
- Configuring and troubleshooting hardware devices and drivers.
- Managing, monitoring and optimizing system performance, reliability and availability.
- Managing, configuring, and troubleshooting storage usage.
- Configuring and troubleshooting network connections.
- Implementing, monitoring, and troubleshooting security.

CIS 46 – Advanced Server Administration

Students will have the ability to:

- Install
- Manage
- Monitor
- Configure
- Troubleshoot

DNS, DHCP, Remote Access, Network Protocols, IP Routing, and WINS in a Windows 2000 network infrastructure.

- Students will have the skills to manage monitor, and troubleshoot Network Address Translation and Certificate Services.

CIS 61 – Systems Analysis

- This course will introduce students to the different concepts, tools and techniques of Systems Analysis and Design.
- CASE tools will be used to illustrate computer-based analysis , design and modeling techniques.

B – Computer Programming

CP 5 – Introduction to Computer Programming

Student will be able to:

- Discuss the history of computing.
- Understand and work within the Software Development Life Cycle.
- Identify issues associated with the protection of data storage and data transmission.
- Describe basic computer architecture; including the instruction fetch and execute cycle, and the different types of memory such as RAM and ROM.
- Demonstrate a proficiency in the use and maintenance of system files.
- Describe the relationship between different base numbering systems and conversion techniques.
- Demonstrate a basic proficiency in algorithm development, including flowcharting.
- Demonstrate a basic understanding of programming languages using JAVA.

CP 11 – Introduction to Computers and Computer Applications

- Be conversant with the basic vocabulary of the computer field.
- Design simple computer programs using flowcharts and Raptor.
- Have a basic understanding of spreadsheets using Excel.
- Have a basic understanding of data bases using Access.
- Write simple computer programs in ALICE.
- Have a basic understanding of computer mathematics including binary/hexadecimal number systems, and interpret various computer codes.
- Access the internet and perform simple searching tasks.

CP 21 – C Programming I

- Students will be able to write programs in the C language.
- Their vocabulary will include elementary input, calculation and output instructions, loops, decisions, functions, arrays and pointers.
- Write and test the programs.

CP 22 – C Programming 2

Students will be able to:

- Enhance their programming skills with regard to program development and debugging.
- They will develop more sophisticated knowledge of programming concepts and techniques.
- Be prepared for an advanced course in Data Structures.
- Be prepared for an entry level position in the computing market.

CP 28 – Microcomputer Applications in Education

- Introduce computer software and technology as it applies to the education environment.

CP 31 – Visual Basic I

- They will know how to clarify a problem
- They will know how to test their understanding of a problem.
- They will learn to speak up, ask questions, and seek help when they are temporarily stymied.
- They will learn the Visual Basic Graphical User Interface.
- They will learn the function and use of the most common Visual Basic controls.
- They will learn the syntax and function of common Visual Basic statements.
- Most importantly, they will learn how to use the logical ideas of sequence, decision, and repetition to create algorithms to write computer programs using Visual Basic syntax.
- They will learn how to test and debug programs, on the path to a working solution, using step through and breakpoints.
- They will learn to use general procedures as a way to break a big program into smaller manageable pieces.

CP 33 – Visual Basic 2

- They will learn and deepen their understanding of how to use decision and repetition techniques to create algorithms to write computer programs.
- They will develop their skills at testing and debugging programs.
- They will learn to break a complicated program into parts by using procedures and functions.
- They will learn the power and importance of arrays.
- They will learn how to create, change and save files and databases.
- They will learn how to search databases, using the Find and Filter methods.
- They will learn drop and drag techniques, and some graphics.
- They will learn why object oriented programming is so important and how to implement it.

CP 41 – Cobol Programming

- To teach fundamental programming concepts in a mainframe computer environment through the vehicle of one classical language used in the business world – COBOL.

CP 61 – Java Programming 1

Students will:

- Have enhanced programming sophistication as it relates to both applications programming and as a tool for web-based program design.
- Understand the use of Java tools for program development and debugging.
- Have a working knowledge of Java and the relationship between the Java compiler, Java Virtual Machine (JVM), and Java bytecode.
- Have an understanding of object-oriented programming concepts by writing both Java applications programs and applets.
- Upon completion of the course the student will have a sufficient knowledge of Java programming concepts and techniques so as to be prepared for a second course in Java programming.

CP 62 – Java Programming 2

Students will be able to:

- Have an enhanced understanding of the extensive capabilities of the Java programming language and its relationship to graphics, networks, and database programs along with its use as the language of the internet.
- Have additional programming sophistication with regards to program design, development and debugging.
- Have been introduced to separate compilation, recursion, file processing, and abstract data types.
- Have a sophisticated knowledge of programming concepts and techniques so as to be prepared for a rigorous course in Data Structures.

CP 66 – Computer Graphics and Design

Students will be able to:

- Look at objects in a quantitative way and to create technically accurate drawings depicting these objects including floor plans, buildings, watches, computer components, etc.
- Apply a basic knowledge of AutoCAD to make these drawings.
- Create drawings based upon what already exists and to design new items (ex: dream houses).
- Fully visualize objects by seeing their technical drawings and blueprints.

CP 67 – Computer Graphics and Design 2

- An advanced course in computer graphics and technical drawing including 3D modeling.

CP 71 – Programming in UNIX/LINUX

- Students will learn a new operating system.
- Students will learn two new editors.
- Those who complete this course successfully will learn how to do programming in this operating system using LINUX.
- They will get a comparative study of different operating systems.
- Those who complete this course will be able to get into business programming with UNIX.

C – Computer Science

CS 12 – Introduction to Computing

- Students will be able to write programs in the C language.
- Their vocabulary will include elementary input, calculation and output instructions, the three loops, decisions, functions, arrays and pointers.

CS 13 – Advanced Programming Techniques

- A working knowledge of the relationship between the compiler, operating system, and underlying hardware.
- The student will have been introduced to separate compilation, recursion, file processing, and abstract data types.
- The student will have sophisticated knowledge of programming concepts and techniques so as to be prepared for a rigorous course in Data Structures.

CS 14 – Computers and Assembler Language Programming

- An introduction to programming in assembly language.
- Students will be able to write, compile, and execute programs using the PC Assembler instruction set.
- The student will gain an appreciation for PC organization and architecture.

CS 35 – Discrete Structures

- The students will have achieved a level of mathematical maturity that will enable them to go on in a Computer Science curriculum.
- They will be prepared for courses in Theory of Computation, Formal Languages and Automata, and Sequential Machines.

CS 37 – Program Design and Analysis

- The students will develop an understanding of data structures.
- The students will learn to stimulate various structure representations.
- The student will be able to write and execute object oriented C++ programs.

D – Data Processing

DP 7 – Introduction to the Internet

- An understanding of the various ways to gain internet access.
- The ability to use standard web browsers to navigate the internet. This will include menuing systems, methods of copying and saving data, methods of bookmarking information sources, operation and management of the browser cache and of cookies.
- The ability to find and utilize general and specialized search engines to obtain information.
- The ability to establish search criteria and apply them to the search process.
- The ability to evaluate the relative quality and value of obtained information, utilizing techniques such as cross-checking and multiple searches with different criteria and search engines.
- The ability to use web browser programs to download information, save web pages and assorted types of computer file types.
- The ability to find email services, establish a User ID and maintain an account, and to use such services to send, receive and archive email.
- Gain a knowledge of security issues (cookies and spyware, viral threats, the importance of firewall protection, the use of encrypted sites). Understand basic techniques to establish and maintain appropriate user security and privacy.

E – Mathematics

MAT M1 – Basic Mathematics

- This course is intended to prepare students to perform satisfactorily on the arithmetic portion of the Compass Math Skills Examination.

MAT M2 – Algebra

- The objectives of this course are to prepare the student for the algebraic part of the Compass Math Skills Exam.

MAT R3 – Algebra

Students will be able to understand and calculate with the following:

- Algebraic notation.

- Number types: natural (i.e. counting), whole, integer, rational, irrational, and real.
- Approximations of real numbers.
- Properties of real numbers.
- The real number line.
- Absolute value.
- Addition, subtraction, multiplication, and division of real numbers.
- Linear inequalities.
- Distance on the real line.
- Constants and variables.
- Mathematical models.
- Laws of exponents.
- Monomials and polynomials.
- Addition, subtraction, multiplication, and division of monomials and polynomials.
- Factoring the polynomials: greatest common factor, grouping, $ax^{2n} + bx^{n} + c$, difference of two squares, perfect squares, difference of two cubes, and sum of two cubes.
- Prime polynomials.
- Operations on rational expressions: reduction to lowest terms, addition, subtraction, multiplication, and division.
- Mixed (complex) fractions.
- Negative integer exponents.
- n^{th} roots.
- Rational exponents.

MAT 9 – College Algebra

Students will be able to:
- Evaluate algebraic expressions.
- Solve linear equations.
- Use the concepts of inequality symbols, absolute values, and distance on the number line.
- Find the domain of an expression.
- Perform basic algebraic operations on terms and polynomials.
- Understand and use special product formulas.
- Master and use techniques of factoring.

Students will have developed skills in:
- Manipulating and simplifying algebraic fractions.
- Understanding negative exponents and applying exponent rules to them.
- Understanding square, cube, and higher roots.
- Simplifying roots and radicals and performing algebraic operations on them.
- Rationalizing monomial and binomial denominators.
- Understanding rational exponents.
- Applying the Pythagorean Theorem.

Students will:

- Understand the distinction between identities and conditional equations, and the concept of solution sets.
- Be able to solve quadratic equations by factoring, by completing the square, and by the quadratic formula.
- Understand interval notation and be able to relate it to inequality notation and to graphs on the number line.
- Understand and solve linear inequalities.
- Be able to apply the distance, midpoint, and slope formulas in the plane.
- Understand graphs of equations in two variables, and intercepts of graphs.
- Be able to sketch graphs of linear equations.
- Know how to determine slope and intercepts of a line directly from the equation.
- Find equations of parallel and perpendicular lines.
- Find both standard and general forms of the equation of a circle, and use either form to find the center and radius.
- Be able to solve two linear equations in two variables.
- Understand the concept of a function.
- Evaluate a function and find its domain.

MAT 10 – College Trigonometry

- Students will have a comprehensive understanding of the trigonometric functions, their graphs, identities and equations.
- When use is made of the material in the calculus and physics classes, the profound role of the trigonometric functions will be made clear.

MAT 7 – Principles of Mathematics

- A survey course introducing the students to various areas of math.

MAT 11 – Finite Mathematics

- Set theory.
- Combinatorics.
- Probability.
- Stochastic Processes.
- Markov Chains.
- Linear Programming.
- Simplex Method.
- Application to business topics such as annuities, perpetuities, amortization.
- Simulation and forecasting.
- An introduction to some of the methods in modern mathematics.

MAT 12 – Concepts of Modern Mathematics

- Students will have acquired an increased appreciation of the imaginative, creative nature of mathematical investigation and discovery.

- They will appreciate how mathematical questions are raised, investigated and answered, and will understand the nature of a mathematical proof.
- They will recognize the way mathematical results, once established, provide logical building blocks for more advanced results.

MAT 13 – Survey of Mathematics and Computer Concepts

- To give students an appreciation of how mathematics is used in practical applications and to introduce the basics of programming logic.

MAT 22 – Statistics for Business

- Provide students in the Business concentration a firm foundation in the application of statistics and statistical software to business making decisions.

MAT 14 – Analytic Geometry and Pre-Calculus Mathematics

Students will be able to:

- Solve linear, quadratic, factorable polynomial, quadratic-like, absolute value, radical and rational equations.
- Solve linear, quadratic, factorable polynomial, absolute value and rational inequalities.
- Perform computations using a scientific calculator.
- Use the Cartesian Plane to solve problems in analytic geometry by applying the distance, midpoint and slope formulas.
- Sketch graphs of numerous functions and equations in two variables, such as the linear, square, cube, square root, absolute value, reciprocal, polynomial, rational, exponential, logarithmic, and trigonometric functions. The students will also know how to apply shifting techniques to obtain graphs of similar functions obtained by those mentioned above.
- Understand the geometric vs. algebraic relationship of the functions described above.
- Construct new functions from known functions by applying algebraic manipulation such as adding, subtracting, multiplying, dividing and composing. Moreover, the student will be able to find the inverse of a one-to-one function and relate the graphs of a one-to-one function and its inverse.
- Determine information about a function by analyzing its graph, such as the domain, range, intercepts, symmetries, intervals of increasing, decreasing and/or constant and whether or not the function is invertible.

MAT 15 – Calculus I

Upon completion of the course students will have the basic knowledge of limits and continuity, and differentiating and integrating functions. They will be able to do the following:

- Evaluate the limits of algebraic functions using different techniques.
- Test functions for continuity.
- Differentiate functions using definition of derivatives and rules of differentiation.
- Differentiate composite functions and functions defined implicitly.
- Find higher derivatives.
- Investigate functions and sketch their graphs using differentiation.
- Solve simple geometric, physical and optimization problems using differentiation.
- Use differentials for approximation of values of functions.
- Evaluate indefinite and definite integrals of some algebraic functions.
- Find areas of some figures using integration.

MAT 16 – Calculus II

Students will be able to:

- Understand and differentiate exponential, logarithmic and trigonometric functions.
- Understand and calculate definite and indefinite integrals of rational, exponential, logarithmic and trigonometric functions.
- Understand and calculate the area between two curves.
- Understand and calculate volume by the disk and shell methods.
- Understand and calculate arc length.
- Understand and calculate work.
- Understand and solve problems in exponential growth and decay.
- Understand and calculate limits using L'Hospital's rule.
- Use integral tables.
- Understand and calculate improper integrals.
- Understand and calculate various properties of the conic sections (i.e. parabolas, ellipses and hyperbolas).

MAT 20 – Elements of Statistics

- The purpose of this course is to introduce students to rudiments of statistics and probability.
- Particular attention is paid to practical real-life applications and statistics.

MAT 21 – Calculus III

Students will know:

- How to investigate properties of plane and space curves using parametric equations, vectors and vector-valued functions.
- Polar coordinates.
- How to investigate properties of functions of several variables using partial derivatives, directional derivatives, the total differential, and the gradient.
- Double integrals.
- Infinite series and their properties.

Students will be ready:

- To study ordinary and partial differential equations.
- To study mechanics, theory of electromagnetic field, quantum theory, and other parts of modern calculus-based physiscs.
- To study engineering sciences.

MAT 25 – College Geometry

- The course will offer students tools and techniques leading to a greater understanding of mathematical methodology.

MAT 55 – Differential Equations

Upon completion of this course, the main concepts students will learn are:

- Solutions of first-order & higher-order Linear Ordinary Differential Equations.
- Solutions of systems of Ordinary Differential Equations.
- To establish criteria for the existence of solutions to Differential Equations.
- Solutions of Cauchy-Euler Equidimensional Equations.
- Solving Differential Equations by numerical approximations techniques.
- To demonstrate how Differential Equations can be useful in solving many types of applied problems.

MAT 56 – Linear Algebra

Upon completion of this course, the main concepts students will learn are:

- Matrix arithmetic and algebra.
- Row operations to solve systems of equations and find inverses.
- Evaluation of determinants.
- Determination of eigenvalues and eigenvectors of a matrix.
- Analysis of n-dimensional vectors.
- Structure of a vector space.
- Basis and dimension of a subspace.
- Definition of a linear transformation.
- Simplex algorithm to solve a linear programming program.
- Select applications of linear algebra.

XI – Nursing

NUR 17 – Calculations for Medication Administration

- Identify units of measurement in the household, apothecary and metric systems.
- Calculate desired dosages from available strengths within and between different systems of measurement.
- Explain abbreviations, symbols and numbers used in medication orders.
- Interpret medication orders.
- Calculate the flow rate of intravenous fluids and IVPB medications.

NUR 18 – Fundamentals of Nursing

- Use knowledge from the biological, physical and behavioral sciences in assessing health care needs of the older adult client.
- Acknowledge the influence of culture on the delivery of nursing care.
- Demonstrate knowledge of adaptive responses of clients in meeting basic needs across the life span.
- Develop critical thinking skills in the application of the nursing process.
- Demonstrate the ability to use the nursing process in assisting the older adult client across the health-illness continuum.
- Identify basic communication techniques utilized in meeting basic needs.
- Recognize legal and ethical principles and their implications for nursing practice.
- Demonstrate appropriate behavior based on legal regulations and ethical guidelines of nursing practice.
- Apply principles of safety in caring for the older adult client.
- Demonstrate skill in performing therapeutic nursing interventions.
- Identify organizational skills in the management of nursing care.
- Identify nursing responsibilities in the use of pharmacological agents.
- Recognize the learning needs of clients in the delivery of nursing care.
- Identify principles of the teaching-learning process.
- Identify available community resources for the older adult client.

NUR 19 – Family-Centered Maternity Nursing

- Incorporate knowledge and skills from the biological, behavioral and physical sciences when caring for the childbearing family.
- Demonstrate knowledge of the influence of culture on the childbearing family in the delivery of nursing care.
- Demonstrate knowledge of adaptive responses of the childbearing family.
- Distinguish the developmental tasks of the childbearing family.
- Use critical thinking skills in the application of the nursing process in assisting the childbearing family across the health/illness continuum.
- Communicate therapeutically with the childbearing woman and family.

- Collaborate with the healthcare team in providing nursing care for the childbearing family.
- Maintain legal and ethical standards while providing nursing care for the childbearing family.
- Utilize principles of safety when caring for the childbearing woman and newborn.
- Demonstrate competency in basic and select therapeutic interventions while caring for the childbearing woman.
- Demonstrate knowledge of the effects of pharmacological agents on the childbearing woman/fetus and newborn.
- Incorporate teaching-learning principles in caring for the childbearing woman and family.
- Identify available community resources for the childbearing family.
- Utilize organizational skills in the management of nursing care for a group of clients.

NUR 20 – Nursing the Emotionally Ill

- Integrate knowledge and skills from the biological, physical and behavioral sciences in caring for clients with psychosocial problems.
- Demonstrate knowledge of the influence of culture on the delivery of nursing care with clients experiencing psychosocial disorders.
- Analyze how developmental stage affects the ability of the individual to adapt psychologically.
- Use critical thinking skills in the application of nursing process to assist the client who has psychosocial problems across the health continuum.
- Communicate therapeutically to assist clients in adapting to psychosocial needs.
- Collaborate with the health team in providing care to clients who have psychosocial problems.
- Maintain legal and ethical standards when providing care for the client who has psychosocial problems.
- Implement a therapeutic nurse-client relationship maintaining psychosocial safety.
- Explain the effects of psychotropic medication for clients who have various psychiatric disorders.
- Incorporate teaching and learning principles to promote psychosocial adaptation across the health continuum.
- Identify available community support groups for clients who have chronic psychosocial disorders.
- Participate in leading a group involving several clients.

NUR 21 – Nursing the Ill Adult I

- Apply knowledge from the biological, physical and behavioral sciences in assessing the adult client experiencing acute and chronic health alternations.
- Include the influence of culture in the delivery of nursing care.

- Demonstrate knowledge of adaptive responses of adult clients experiencing acute and chronic health alternations.
- Further develop critical thinking skills in the application of the nursing process.
- Demonstrate the ability to use the nursing process in assisting the adult client across the health-illness continuum.
- Communicate accurately and effectively with adult clients and health team members.
- Demonstrate appropriate behavior based on legal regulations and the ethical guidelines of nursing practice.
- Apply principles of safety when caring for the adult client.
- Demonstrate competencies in performing therapeutic nursing interventions.
- Apply knowledge of pharmacological agents in the administration of medications.
- Apply teaching learning principles to adult clients across the health-illness continuum.
- Identify the need for community resources for adult clients.
- Utilize organization skills in the management of nursing care.

NUR 22 – Nursing the Ill Adult II

- Integrate knowledge from the biological, physical, and behavioral sciences when caring for the adult and family experiencing complex and/or long-term health alternations.
- Demonstrate knowledge of the influence of culture in the delivery of nursing care.
- Demonstrate knowledge of adaptive responses of adult clients and their families experiencing complex and/or long-term health alternations.
- Use critical thinking skills in the application of the nursing process for adult clients and families experiencing complex and/or long term heath alternations across the Health/Illness Continuum.
- Use the nursing process in assisting adult clients and their families experiencing complex and/or long-term alternations across the Health/Illness Continuum.
- Communicate therapeutically with adult clients, families, and other health team members.
- Collaborate with the health care team when providing nursing care for the adult client and family with complex and/or long-term health alternations.
- Maintain legal and ethical standards while providing nursing care for the adult client and family experiencing complex and/or long-term health alternations.
- Maintain legal and ethical standards while providing nursing care for the adult client and family experiencing complex and/or long-term health alternations.
- Apply the principles of safety when caring for the adult client experiencing complex and/or long-term health alternations.
- Demonstrate competency in therapeutic nursing interventions.
- Apply knowledge of pharmacological agents when caring for adult clients with complex and/or long-term alternations.
- Incorporate teaching-learning principles while caring for adult clients with complex and/or long-term health alterations.

- Utilize organizational skills in the management of nursing care for a group of clients.
- Identify available community resources for adult clients and their families experiencing complex and/or long-term health problems.

NUR 23 – Nursing of Children

- Incorporate knowledge and skills from the biological, behavioral and physical sciences when caring for children from infancy through adolescence.
- Demonstrate knowledge of the influence of culture of the childrearing family in the delivery of nursing care.
- Demonstrate knowledge of adaptive responses of well and ill children and their families in meeting complex needs.
- Distinguish developmental tasks of children across the health/illness continuum.
- Use critical thinking skills in the application of the nursing process in assisting children and their family across the health/illness continuum.
- Communicate therapeutically with children-families.
- Collaborate with the healthcare team when caring for children and their families.
- Maintain legal-ethical standards while providing care for children and their families.
- Utilize principles of safety based on growth and developmental levels of children.
- Demonstrate competency in therapeutic nursing interventions, while caring for children.
- Demonstrate knowledge of the effects of pharmacological agents when caring for children.
- Incorporate teaching-learning principles with children and their families.
- Provide anticipatory guidance for children and their families to prevent potential developmental and health problems.
- Identify available community resources for the childrearing family.
- Utilize organizational skills in the management of nursing care for a group of clients.

NUR 24 – Issues in Nursing

- Analyze current critical issues in nursing and health care.
- Examine selected political and economic trends as they relate to nursing.
- Differentiate between the role of the nursing student and the beginning Associate Degree Nurse.
- Describe ethical standards and principles in nursing.
- Recognize moral and legal ethical bases for decision making in nursing.
- Recognize the value of continuing education and growth.

XIII – Physical Sciences

A – Engineering

ENG 22 – Introduction to Electric Circuits

- Students will develop problem solving skills in Basic Concepts. They will acquire knowledge of Systems of Units, Charge and Current, Voltage, and Power and Energy.
- Students will develop problem solving skills in Basic Laws. They will acquire knowledge of Nodes, Branches, Meshes, and Loops. They will learn Kirchhoff's Laws. They will learn Ohm's Law. They will acquire knowledge of Series Resistors and Voltage Division, Parallel Resistors and Current Division, and Wye-Delta Transformations.
- Students will develop problem solving skills in Circuit Theorems. They will acquire knowledge of Superposition, Source Transformation, Thevenin's Theorem, and Norton's Theorem.
- Students will develop problem solving skills in Operational Amplifiers. They will acquire knowledge of Ideal Op Amp, Simple Amplifier Circuits, and Cascaded Op Amp Circuits.
- Students will develop problem solving skills in Capacitors and Inductors. They will acquire knowledge of Capacitors, Series and Parallel Capacitors, Inductors, Series and Parallel Inductors, and Integrator and Differentiator.
- Students will develop problem solving skills in First-Order Circuits. They will acquire knowledge of First Order Linear Differential Equation, Finding Initial and Final Values, RC Circuit and RL Circuit.
- Students will develop problem solving skills in Second-Order Circuits. They will acquire knowledge of Second Order Linear Differential Equation, Finding Initial and Final Values, Series RLC Circuit, and Parallel RLC Circuit.

ENG 23 – Introduction to Thermodynamics

- Students will develop problem solving skills in basic concepts of thermodynamics. They will acquire knowledge of Dimensions, SI and English Units, Significant Digits, Closed and Open Systems, Properties of a System, State and Equilibrium. Processes and Cycles, The Steady-Flow Process, and Forms of Energy. They will learn Zeroth Law of Thermodynamics. They will acquire knowledge of Temperature Scales, and Pressure. They will learn Variation of Pressure with Depth, and Pascal's Principle, The Manometer, and Barometer and the Atmospheric Pressure.
- Students will develop problem solving skills in Properties of Pure Substances. They will acquire knowledge of Pure Substances. They will learn Phases of a Pure Substance. They will acquire knowledge of Phase-Change Processes of Pure Substances, Compressed Liquid and Saturated Liquid, Saturated Vapor and Superheated Vapor, Saturation Temperature and Saturation Pressure, Property Diagrams for Phase-Change Processes: The T-v Diagram; The P-v Diagram; and

The P-T Diagram and The P-v-T Surface. They will acquire knowledge of Property Tables. They will learn Enthalpy. They will acquire knowledge of Saturated Liquid; Saturated Vapor; Saturated Liquid-Vapor Mixture; Superheated Vapor; and Compressed Liquid. They will acquire knowledge of The Ideal-Gas Equation of State, Compressibility Factor-A measure of Deviation from Ideal-Gas Behavior, and Other Equations of State: Van der Waal's Equation of State; and Virial Equation of State. They will acquire knowledge of Specific Heats, Internal Energy, Enthalpy and Specific Heats of Ideal Gases, Specific-Heat Relations of Ideal Gases, and Internal Energy, Enthalpy and Specific Heats of Solids and Liquids.

- Students will develop problem solving skills in Energy Transfer by Heat, Work and Mass. They will acquire knowledge of Heat Transfer. They will learn Energy Transfer by Work. They will acquire knowledge of Electrical Work, Mechanical Forms of Work: Moving Boundary Work; Shaft Work; Spring Work; and Other Mechanical Forms of Work, and Non-mechanical Forms of Work. They will learn Conservation of Mass Principle. They will acquire knowledge of Mass and Volume Flow Rates. They will learn Conservation of Mass Principle. They will acquire knowledge of Mass Balance for Steady-Flow Processes, Flow Work and the Energy of a Flowing Fluid, Total Energy of a Flowing Fluid, Energy Transport by Mass, and Mechanisms of Heat Transfer: Conduction, Convection and Radiation.
- Students will develop problem solving skills in the First Law of Thermodynamics. They will learn The First Law of Thermodynamics. They will acquire knowledge of, Energy Balance, Energy Change of a System, Mechanisms of Energy Transfer, Energy Balance for Closed Systems, Mass Balance for Steady-Flow Systems, and Energy Balance for Steady-Flow Systems. They will acquire knowledge of Some Steady-Flow Engineering Devices: Nozzles and Diffusers; Turbines and Compressors; Throttling Valve; Heat Exchangers; Mixture Chambers; and Pipe Duct Flow.
- Students will develop problem solving skills in The Second Law of Thermodynamics. They will acquire knowledge of Thermal Energy Reservoirs, and Heat Engines. They will learn the Second Law of Thermodynamics: Kevin-Planck Statement. They will acquire knowledge of Refrigerators and Heat Pumps, and Coefficient Performance. They will learn the Equivalence of the Two Statements. They will acquire knowledge of Reversible and Irreversible Processes. They will learn The Carnot Principles. They will acquire knowledge of The Carnot Cycle, The Carnot Heat Engine, Refrigerator and Heat Pump, and The Thermodynamic Temperature Scale.
- Students will develop problem solving skills in Entropy. They will learn What is Entropy. They will acquire knowledge of A Special Case: Internally Reversible Isothermal Heat Transfer Process. They will learn The Increase of Entropy Principle. They will acquire knowledge of Entropy Change of Pure Substances, Isentropic Processes, Property Diagrams Involving Entropy, The T ds Relations, and Entropy Change of Ideal Gases, Constant Specific Heats (Approximate Analysis), Isentropic Processes of Ideal Gases, Variable Specific Heats (Exact Analysis), Relative Pressure and Relative Specific Volume, Reversible Steady-

Flow Work, Isentropic Efficiencies of Steady-Flow Devices: Turbines; Compressors and Pumps; and Nozzles.

- Students will develop problem solving skills in Gas Power Cycles. They will learn Basic Considerations in the Analysis of Power Cycle. They will learn The Carnot Cycle and its Value in Engineering. They will acquire knowledge of Otto Cycle: The Ideal Cycle for Spark-Ignition Engines, Diesel Cycle: The Ideal Cycle for Compression-Ignition Engines, Stirling and Ericsson Cycles, Brayton Cycle: The Ideal Cycle for Gas-Turbine Engines, Development of Gas Turbines, Deviation of Actual Gas-Turbine Cycles from Idealized Ones, The Brayton Cycle with Regeneration, The Brayton Cycle with Intercooling, Reheating and Regeneration, Ideal Jet-Propulsion Cycles, and Modifications to Turbojet Engines. They will learn Second-law Analysis of Gas Power Cycles.
- Students will develop problem solving skills in Vapor and Combined Power Cycles. They will acquire knowledge of The Carnot Vapor Cycle, The Rankine Cycle: The Ideal Cycle for Vapor Power Cycles, Energy Analysis of the Ideal Rankine Cycle, The Ideal Reheat Rankine Cycle, The Ideal Regenerative Rankine Cycle, Refrigeration and Heat Pumps, The Reversed Carnot Cycle, The Ideal Vapor-Compression Refrigeration Cycle, and Actual Vapor-Compression Refrigeration Cycle.
- Students will develop problem solving skills in Property Tables and Charts – SI Units. They acquire knowledge of Molar Mass, Gas Constant, and Critical-Point Properties, Ideal-Gas Specific Heats of Various Common Gases, Properties of Common Liquids, Solids and Foods, Saturated Water-Temperature Table, Saturated Water-Pressure Table, Superheated Water, Compressed Liquid Water, Saturated Ice Water-Vapor, Saturated Refrigerant-134a-Temperature Table, Saturated Refrigerant-134a-Pressure Table, Superheated Refrigerant-134a, Ideal-Gas Properties of air, Ideal-GAS properties of Nitrogen, N2, Ideal-Gas Properties of Oxygen, O2, Ideal-Gas Properties of Carbon Dioxide, CO2, Ideal-Gas Properties of Carbon Monoxide, CO, Ideal-Gas Properties of Hydrogen, H2, Ideal-Gas Properties of Water Vapor, H2O, Ideal-Gas Properties of Monatomic Oxygen, O, Ideal-Gas Properties of Hydroxyl, OH, Nelson-Obert Generalized Compressibility Chart-Low Pressures, Nelson-Obert Generalized Compressibility Chart-Intermediate Pressures, and Nelson-Obert Generalized Compressibility Chart High Pressures.
- Students will develop problem solving skills in Property Tables and Charts – English Units. They will acquire knowledge of Molar Mass, Gas Constant, and Critical-Point Properties, Ideal-Gas Specific Heats of Various Common Gases, Properties of Common Liquids, Solids and Foods, Saturated Water-Temperature Table, Saturated Water-Pressure Table, Superheated Water, Compressed Liquid Water, Saturated Ice-Water Vapor, T-s Diagram for Water, Saturated Refrigerant-134a-Temperature Table, Saturated Refrigerant-134a-Pressure Table, Superheated Refrigerant-134a, P-h Diagram for Refrigerant-134a, Ideal-Gas Properties of Air, Ideal-Gas Properties of Nitrogen, N2, Ideal-gas Properties of Oxygen,)2, Ideal-Gas Properties of Carbon Dioxide, CO2, Ideal-Gas Properties of Carbon Monoxide, CO, Ideal-Gas Properties of Hydrogen, H2, and Ideal-Gas Properties of Water Vapor, H2O.

B – Physics

PHY 11 – General Physics I

- Students will develop problem solving skills in Measurement and Estimating**.** They will acquire knowledge of Measurement and Uncertainty, Significant Figures, Units, Standards, and the SI System, Converting Units, Estimating Order of Magnitude, and Dimension and Dimensional Analysis.
- Students will develop problem solving skills in Kinematics in One Dimension. They will acquire knowledge of Reference Frames, Position and Displacement, Average and Instantaneous Velocity, Acceleration. Students will develop problem solving skills in Motion at Constant Acceleration, and Graphical Analysis of Linear Motion.
- Students will develop problem solving skills in Kinematics in Two Dimensions. They will acquire knowledge of Vectors and Scalars, Addition and Subtraction of Vectors, Graphical Methods, Multiplication of a Vector by a Scalar, And Adding Vectors by Components. Students will develop problem solving skills in Projectile Motion.
- Students will develop problem solving skills in Dynamics: Newton's Laws of Motion. They will learn Newton's First Law of Motion, Newton's Second Law of Motion, and Newton's Third Law of Motion. They will acquire knowledge of Weight, Normal Force, and Friction. They will learn Free-Body Force Diagrams. Students will develop problem solving skills in Inclines.
- Students will develop problem solving skills in Circular Motion. They will acquire knowledge of Kinematics of Uniform Circular Motion, Dynamics of Uniform Circular Motion, And Highway Curves, Banked And Unbanked.
- Students will develop problem solving skills in Gravitation. They will learn Newton's Law of Universal Gravitation. They will acquire knowledge of Gravity Near the Earth's Surface, And Satellites And "Weightlessness". They will learn Kepler's Laws.
- Students will develop problem solving skills in Work and Energy. They will learn Work Done by a Constant Force, And Work Done by a Varying Force. They will acquire knowledge of Kinetic Energy. They will learn Work-Energy Principle. They will acquire knowledge of Potential Energy. They will learn Conservative and Non-Conservative Forces. They will acquire knowledge of Mechanical Energy and Its Conservation, Springs, And Power.
- Students will develop problem solving skills in Linear Momentum. They will acquire knowledge of Momentum and its Relation to Force. They will learn Conservation Of Momentum. They will acquire knowledge of Collisions and Impulse. They will learn Conservation Of Momentum Conservation Of Energy and Momentum in Collisions. They will acquire knowledge of Elastic Collisions in One Dimension, Inelastic Collisions, Collisions in Two or Three Dimensions, And Center Of Mass.
- Students will develop problem solving skills in Rotational Motion. They will acquire knowledge of Angular Qualities, Constant Angular Acceleration, Rolling

Motion, Torque, Rotational Dynamics, Torque and Rotational Inertia, And Rotational Kinetic Energy. They will learn Angular Momentum and Its Conservation. They will acquire knowledge of Vector Nature of Angular Quantities.

- Students will develop problem solving skills in Static Equilibrium. They will acquire knowledge of the Conditions for Equilibrium.
- Students will develop problem solving skills in Fluids. They will acquire knowledge of Phases of Matter, Density and Specific Gravity, Pressure in Fluids, And Atmospheric Pressure and Gauge Pressure. They will learn Pascal's Principle. They will acquire knowledge of Measurement of Pressure. They will learn Buoyancy and Archimedes' Principle. They will acquire knowledge of Fluids in Motion, Flow Rate, and Equation of Continuity. They will learn Bernoulli's Equation.
- Students will develop problem solving skills in Simple Harmonic Motion. They will acquire knowledge of Displacement, Velocity and Acceleration SHM, Energy in the Simple Harmonic Oscillator, and the Period and Sinusoidal Nature of SHM.

PHY 12 – General Physics II

- Students will develop problem solving skills in Sound. They will acquire knowledge of Characteristics of Sound, Vibrating Strings, and Air Columns.
- Students will develop problem solving skills in Electric Charge and Electric Field. They will acquire knowledge of Electric Charge. They will learn Conservation Electric Charge. They will acquire knowledge of Insulators and Conductors. They will learn Coulomb's Law. They will acquire knowledge of Solving Problems Involving Coulomb's Law and Vectors, the Electric Field, Electric Field Lines, and Electric Fields and Conductors. They will learn Gauss's Law.
- Students will develop problem solving skills in Electric Potential. They will acquire knowledge of Electric Potential Energy and Electric Potential Difference, Relation Between Electric Potential and Electric Field, Equi-Potential Lines, the Electron Volt, a Unit Of Energy, Electric Potential Due To Point Charges, Capacitance and Dielectrics.
- Students will develop problem solving skills in Electric Currents. They will acquire knowledge of Electric Current, and Resistivity. They will learn Ohm's Law. They will acquire knowledge of Resistance and Resistors, and Electric Power.
- Students will develop problem solving skills in DC Circuits. They will acquire knowledge of EMF and Terminal Voltage, and Resistors in Series and in Parallel. They will learn Kirchhoff's Rules. They will acquire knowledge of Magnets and Magnetic Fields, Electric Currents Produce Magnetic Fields, Force on an Electric Current in a Magnetic Field, Force on Electric Charge Moving in a Magnetic Field, Magnetic Field Due to a Long Straight Wire, Force Between Two Parallel Wires, and Solenoids. They will learn Ampere's Law. They will acquire knowledge of Mass Spectrometer.

- Students will develop problem solving skills in Electromagnetic Induction And Faraday's Law. They will acquire knowledge of Induced EMF. They will learn Faraday's Law of Induction, and Lenz's Law. They will acquire knowledge of EMF Induced in a moving conductor, changing magnetic flux produces an Electric Field, Transformers and Transmission of Power, Inductance, Energy Stored in a Magnetic Field, LR Circuit, and AC Circuit.
- Students will develop problem solving skills in Electromagnetic Waves. They will acquire knowledge of Changing Electric Fields Produce Magnetic Fields. They will learn Maxwell's equations. They will acquire knowledge of the Electromagnetic Spectrum.
- Students will develop problem solving skills in Geometric Optics. They will acquire knowledge of the Ray Model of Light, and Index of Refraction. They will learn Law of Reflection and Law of Refraction, Mirrors, Formation of Images by Plane and Spherical Mirrors, Total Internal Reflection, Thin Lenses, the Lens Maker Equation, and Formation of Images by the Thin Lens Equation: Magnification.
- Students will develop problem solving skills in the Wave Nature of Light. They will learn Waves Versus Particles. They will acquire knowledge of Interference – Young's Double-Slit Experiment, and Interference by Thin Films.
- Students will develop problem solving skills in Optical Instruments. They will acquire knowledge of Cameras – Film and Digital, Human Eye – Corrective Lenses, and Magnifying Glass, Telescopes, and Compound Microscope.

PHY 13 – Advanced General Physics I

- Students will develop problem solving skills in Introductory Physics. They will acquire knowledge of Fundamental Physical Quantities and Units, Accuracy and Significant Figures, Dimensional Analysis Estimates, and Scalars and Vectors.
- Students will develop problem solving skills in Straight-Line Motion. They will acquire knowledge of Position and Displacement, Speed and Velocity, and Acceleration. Students will develop problem solving skills in Motion with Constant Acceleration, and Freely Falling Objects.
- Students will develop problem solving skills in Motion in Two and Three Dimensions. They will acquire knowledge of Position and Displacement, Speed and Velocity, and Acceleration. Students will develop problem solving skills in Motion with Constant Acceleration, and Freely Falling Objects.
- Students will develop problem solving skills in Motion in Two and Three Dimensions. They will acquire knowledge of Vector Position and Vector Displacement, and Vector Velocity and Vector Acceleration. Students will develop problem solving skills in Motion with Constant Acceleration, Projectile Motion, Uniform Circular Motion and Relative Motion.
- Students will develop problem solving skills in Newton's Laws. They will acquire knowledge of Common Forces. They will learn Newton's First Law of Motion, Newton's Second Law of Motion, and Newton's Third Law of Motion. Students will develop problem solving skills in Forces and Free-Body Diagrams and Circular Motion.

- Students will develop problem solving skills in Work and Kinetic Energy. They will acquire knowledge of Kinetic Energy and Work. They will learn the Work-Energy Theorem. They will acquire knowledge of Work with Constant Forces, Work with Forces that Vary with Position and Conservative and Non-Conservative Forces. Students will develop problem solving skills in Power.
- Students will develop problem solving skills in Potential Energy and Conservation of Energy. They will acquire knowledge of Potential Energy and Conservative Forces. They will learn Energy Conservation. Students will develop problem solving skills in Motion in Two or Three Dimensions.
- Students will develop problem solving skills in Linear Momentum, Collisions, and the Center of Mass. They will acquire knowledge of Momentum. They will learn Conservation Momentum. They will acquire knowledge of Collisions and Impulse, Perfectly Inelastic Collision, Explosions, Elastic Two-Body Collisions in One Dimension, Elastic Collision in Two and Three Dimensions and Center of Mass.
- Students will develop problem solving skills in Rotational Motion. They will acquire knowledge of Moment of Inertia, Angular Qualities and Constant Angular Acceleration. They will learn Parallels Between Rotational Motion and Linear Motion. They will acquire knowledge of Rotational Kinetic Energy, Torque, Work and Energy in Angular Motion and Angular Momentum. They will learn Conservation Angular Momentum. Students will develop problem solving skills in Rolling.
- Students will develop problem solving skills in Statics. They will learn Equilibrium Conditions.
- Students will develop problem solving skills in Gravitation. They will learn Newton's Inverse-Square Law. They will acquire knowledge of Planetary Motion and Satellites, and Gravitational Motion.
- Students will develop problem solving skills in Oscillatory Motion. They will acquire knowledge of the Kinematics of Simple Harmonic Motion. They will learn the Connection to Circular Motion. They will acquire knowledge of Springs and Simple Harmonic Motion, Energy and Simple Harmonic motion, and the Simple Pendulum.
- Students will develop problem solving skills in Properties of Fluids. They will acquire knowledge of States of Matter and Density and Pressure. They will learn Pressure in a Fluid at Rest, Buoyancy and Archimedes' Principle, Fluids in Motion, the Equation of Continuity and Bernoulli's Equation.

PHY 14 – Advanced General Physics II

- Students will develop problem solving skills in Waves. They will acquire knowledge of Types of Waves, the Wave Equation, Periodic Waves, Traveling Waves, Energy and Power in Waves, Standing Waves, Sound and Doppler Effect.
- Students will develop problem solving skills in Superposition and Interference of Waves. They will learn the Superposition Principle. They will acquire knowledge of Charge is a Property of Matter and Charge is Conserved and Quantized. They will learn Coulomb's Law. They will acquire knowledge of

Electric Field, Electric Field Lines, the Field of a Continuous Distribution, and Motion of a Charge in a Field.

- Students will develop problem solving skills in Gauss' Law. They will learn Gauss' Law. They will acquire knowledge of using Gauss' Law to Determine Electric Field, and Conductors and Electric Fields.
- Students will develop problem solving skills in Electric Potential. They will acquire knowledge of Electric Potential Energy, and Electric Potential. They will learn Equipotentials. They will acquire knowledge of Determining Fields from Potentials, the Potentials of Charge Distributions, and Potentials and Fields Near Conductors. They will acquire knowledge of Capacitance and Dielectrics.
- Students will develop problem solving skills in Electric Currents. They will acquire knowledge of the Electric Battery, Electric Current, and Resistivity. They will learn Ohm's Law. They will acquire knowledge of Resistance and Resistors and Electric Power.
- Students will develop problem solving skills in DC Circuits. They will acquire knowledge of EMF and Terminal Voltage. They will acquire knowledge of Resistors in Series and in Parallel. They will learn Kirchhoff's Rules. They will acquire knowledge of Circuits Containing Capacitors in Series and in Parallel. They will acquire knowledge of RC Circuits-Resistors and Capacitor in Series. They will acquire knowledge of Ammeters and Voltmeters.
- Students will develop problem solving skills in Magnetism. They will acquire knowledge of Magnets and Magnetic Fields. They will learn Biot-Savart Law. They will acquire knowledge of how Electric Currents Produce Magnetic Fields, the Force on Electric Charge Moving in a Magnetic Field, force on Electric Charge Moving in a Magnetic Field, Magnetic Field Due to a Long Straight Wire, Force Between Two Parallel Wires, Solenoids. They will learn Ampere's Law.

XIV – Tourism and Hospitality

TAH 1 – Introduction to Tourism and Hospitality

- Appreciate the importance of the tourism/hospitality industry in the US and world economies.
- List the characteristics of the tourism product: perishability, seasonality, intangibility, service-centered.
- Develop an understanding of the motivations of travelers (Mazlow and Plog).
- Describe the traditional methods of distributing the travel product and compare and contrast them.
- Demonstrate an understanding of the interaction of time and distance in transportation and summarize the developments in transportation over time.
- Describe the major classification of attractions and entertainment in the tourism industry.
- List the components of the hospitality industry and classify accommodation types by price, room type, level of service, location, and emphasis: resort, casino.
- Review the impact of deregulation on the airline business and discuss the immediate and long-range results of deregulation.
- Evaluate the cruise experience as a hospitality function.
- Recognize the importance of the meeting/event planning function in the tourism/hospitality industry.
- Discuss the impact of science and technology on food and beverages and explain the importance of rhythm, timing and flow in food service operations.
- Discuss the importance of a menu and its impact on production and service delivery.
- Appreciate the importance of the tourism/hospitality industry in the US and world economies.
- List the characteristics of the tourism product: perishability, seasonality, intangibility, service-centered.
- Describe the traditional methods of distributing the travel product and compare and contrast them.
- Demonstrate an understanding of the interaction of time and distance in transportation and summarize the developments in transportation over time.
- Describe the major classification of attractions and entertainment in the tourism industry.
- List the components of the hospitality industry and classify accommodation types by price, room type, level of service, location, and emphasis: resort, casino.
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- Evaluate the cruise experience as a hospitality function.
- Recognize the importance of the meeting/event planning function in the tourism/hospitality industry.
- Discuss the impact of science and technology on food and beverages and explain the importance of rhythm, timing and flow in food service operations.

- Discuss the importance of a menu and its impact on production and service delivery.

TAH 2 – Destination Geography

- Identify major worldwide tourism destinations.
- Identify major tourist attractions within said tourism destinations.
- Effectively read an atlas, and plot latitude and longitude coordinates.
- To develop an understanding of geographic concepts as related to the tourism industry.
- Feel more confident about their classroom presentations.
- To promote an appreciation of the physical and human characteristics of places.
- To develop an understanding of the primacy of place as the organizing principle of geography.

TAH 12 – Tourism Entrepreneurship

- Identify terms, thereby increasing their vocabulary related to the tourism industry.
- Delineate the characteristics of good service and develop and appreciation of the importance of service in the industry.
- Identify the characteristics common to entrepreneurs.
- List the issues, risks, and rewards facing potential entrepreneurs.
- Developing a knowledge of business processes related to and used in the industry.
- Exploring careers in tourism/hospitality.
- Developing entrepreneurial skills.
- Developing basic skills in reading, writing, communication, computation and analysis.
- Developing personally and professionally to create leaders for the tourism and hospitality industry.
- Identify effective sales techniques and distinguish among the four different kind of selling.
- Identify the six essential steps of the sales cycle.
- Develop the knowledge to conduct efficient research.
- Calculate D.I.T and F.I.T vacations otherwise known as the mathematics of tourism.
- Evaluate Willingham buyer types.
- Knowledge of how tourism/hospitality products are marketed and sold.

TAH 15 – Cruises and Specialty Markets

- Describe the contemporary cruise experience.
- Distinguish among different types of itineraries and describe the typical clients onboard cruises of different lengths.
- Show how to overcome clients' objections to cruise purchase and relate what typically takes place on a day at sea and a day at port Classify cruise jobs.
- Define nautical cruise terminology.

- Define the world's major cruise regions and itinerary patterns.
- Compare mainstream cruises with special interest cruises.
- Show how the concepts of adventure and tourism combine to form adventure tourism.
- Identify the components of adventure tourism-travel, location, activities, adventure.
- Identify adventure tourism entrepreneurs and the evolution of small enterprises in adventure tourism.
- List types of eco-tourism ventures: nature-bases, culture-bases, historical, educational, adventure-based. Give examples.
- Compare eco-tourism adventures in three different countries.
- Relate the impact of sustainable tourism to the change and growth of tourism markets.

TAH 17 – Tourism Technology

- Create a Passenger Name Record.
- Book a PNR which includes 5 different characteristics of a specific itinerary.
- Construct a proper food service spreadsheet for a specific event.
- Use MS Excel to create spreadsheets to track expenditures in all phases of the foodservice operation.

TAH 18 – Case Studies in Tourism and Hospitality

- Read and comprehend cases related to tourism/ hospitality businesses.
- Identify terms, thereby increasing their vocabulary related to the tourism industry.
- State the main issue(s) in the case.
- Write case summaries.
- Analyze cases by writing reactions and questions related to cases.
- Discuss the issues related to cases.
- Perform a SWOT analysis, identifying the strengths, weaknesses, opportunities and threats inherent in the case.
- Formulate and defend alternative recommendations.
- Identify and evaluate the performance of stakeholders in the cases.
- Develop hypotheses to explain actions and outcomes described in the case studies.
- Draw conclusions regarding the understandings learned from the case.
- Delineate the characteristics of good service.
- Identify characteristics of business leadership.
- Identify the principles and practices of market segmentation.
- Identify the characteristics common to entrepreneurs.
- List the issues, risks and rewards facing potential entrepreneurs.

TAH 19 – The Business of Tourism and Hospitality

- Read and comprehend current articles related to the business of tourism
- Identify and understand vocabulary used throughout the tourism industry.

- Write business plans for different hospitality companies.
- Define and evaluate the importance of service in business.
- Identify issues, such as economic, political Terrorism, etc. that affect the business of Tourism.

TAH 22 – Front Office Operations

- Identify and develop the terms and jargon.
- Utilization of hotel property management systems.
- Increased presentation and oral skills.
- Communication skills.
- Analytical, and writing skills.
- Knowledge of products and services offered by hotels.
- Research skills.
- Career exploration.

TAH 43 - Event Catering Management

- Define “catering”; distinguish between “on-premise” and “off-premise” catering and give examples.
- Name at least 3 advantages of off-premise catering as a business.
- Name at least 5 important considerations in planning a catered event, including the most important one: pleasing the client.
- Self-evaluate characteristics/skills needed to operate a successful catering business.
- Identify their own food background (ethnic, cultural, preferential, experiential).
- Competently and safely slice, dice and julienne a raw vegetable using a chef's knife.
- Name at least 5 marketing tools for a catering business.
- Work with others on a group project, arrive at consensus and delegate tasks.
- Identify three important facts to ascertain during the initial interview with a client.
- Plan and critique menus using the following concepts: cost, appropriate dishes for the season, type of event, tastes of the client, limitations of the venue, variation in ingredients, colors, flavors, party theme.
- Identify at least 3 popular grape varieties used for wine and pair at least three wines with appropriate food choices.
- Discuss the legal ramifications of caterers buying and serving alcohol.
- Schedule preparation activities for a planned actual party as well as the virtual party outlined in the portfolios. Also, diagram a layout for actual and virtual parties including cooking and prep areas, serving tables with platter and chafing dish arrangements, electrical outlets, staging and cleanup areas.
- Name the 3 sources of food contamination (bacterial, chemical, physical) Also, Identify the safe temperatures for cooking, chilling and holding foods.
- Calculate the cost of a recipe based on costs of bulk quantities of ingredients.
- Identify the 4 categories of expense for caterers: food, beverages, labor and equipment.

- Name 5 line items that should be included in a catering company's budget and name at least one way to build profit into a proposal for a catering job.
- Use a formula to determine the break-even point of a catering company with defined fixed costs, and critique the actual party and suggest improvements in menu, layout, and schedule.

TAH 65 – Airport and Aviation Management

- Read and be able to discuss the history and development of the Aviation industry in the United States.
- Identify aviation industry terms, thereby increasing vocabulary related to the tourism industry.
- Identify the pioneers of the aviation industry and discuss their impact on transportation and global development.
- Analyze the developmental governmental intervention in terms of regulation and the resulting benefits and detractions of deregulation versus regulation of US air transportation.
- Identify the governmental agencies that have an impact on US aviation and their roles and responsibilities to the public and industry i.e., FAA, DOT, NTSB.
- Perform a SWOT analysis, identifying the strengths, weaknesses, opportunities and threats inherent in the Jet Blue case.
- Analyze the events of 9/11 and be able to develop hypotheses, and draw Conclusions regarding airline safety. Formulate and defend alternative recommendations learned as an outcome of engaging in critical analysis.
- Identify characteristics of business leadership and characteristics of entrepreneurs in studying airline CEO's. List the issues, risks and rewards facing potential entrepreneurs.
- Discuss the major issues and steps in making and keeping an airline successfully competitive.
- Identify the impact of 9/11 on US Aviation as it pertains to the development of the Airline Security Act, the NTSB, Dept. of Homeland Security.
- Delineate the characteristics of good service through the study of Southwest Airlines and Jet Blue.

TAH 71 – Introduction to Professional Food Service

- Examine ten major moments in the development of the foodservice industry.
- Describe major types of foodservice operations.
- Discuss and evaluate trends in the foodservice industry.
- Develop an understanding of different types of menus.
- Evaluate five factors influencing menu planning.
- Discuss 12 ways of marketing the menu.
- Demonstrate pricing and designing the menu.
- Describe 10 purchasing considerations and purchasing methods.
- Examine product selection using selected criteria. Explain process of receiving, storage and inventory of restaurant supplies and equipment.
- Identify and demonstrate ten sanitation guidelines.

- Develop a HACCP program.
- Recognize how food poisoning happens.
- Evaluate and demonstrate proper food handling techniques.
- Explain major principles of quantity food preparation.
- Demonstrate production planning and quality controls.
- Evaluate production equipment.
- Demonstrate four types of service and proper place settings for restaurant and banquet.
- Evaluate and demonstrate good customer service techniques.
- Discuss proper front of the house management techniques.
- Evaluate career opportunities in the foodservice industry.
- Recognize the importance of time management.
- Develop an awareness of the staff recruitment, orientation and training process.
- Explain keys to developing effective communication skills.

TAH 72 – Restaurant and Food Service Operations

- To be able to state 5 reasons for going into the foodservice business and 5 liabilities or drawbacks for doing so.
- Distinguish among four foodservice career and investment options: buy, build, franchise and manage.
- Define “foodservice” concept.
- Evaluate various foodservice concepts per the readings and instructor guidelines.
- Describe at least ten elements that comprise a foodservice concept.
- Discuss at least one example of successful foodservice concepts in each of the following areas: fast food, chain, fine dining.
- Distinguish among the following types of foodservice concepts: fast food, chain and fine dining.
- Describe the steps in formulating a foodservice concept.

TAH 73 – Cultural Foods

- Learning about the characteristics of destinations (culture, history, geography, food, attractions, etc.).
- Knowledge of products and services offered by various segments of the tourism/hospitality industry.
- Knowledge of how tourism/ hospitality products are marketed and sold.
- The importance of place in destinations.
- Developing a specialized vocabulary used by industry professionals.
- Developing and using research skills.
- Exposing students to current events in the industry and the world.
- Developing psycho-social skills.
- Having students use a variety of learning strategies including traditional lecture, experiential learning, active learning, applied learning and collaborative learning.

TAH 74 – Menu and Dining Room Management

- Describe the following segments of the foodservice industry: commercial, institutional, transportation, health service, clubs, and central commissaries feeding.
- Discuss how the economy, society, labor force, employee turnover, eating habits, government regulations, and technology are likely to affect the future of the industry.
- Explain how the menu functions as both a sales tool and a production sheet.
- Examine how the physical factors of the facility, labor considerations, guest expectations, and the appearance and variety of food influences menu planning.
- Describe how customers' value perception; pricing psychology, and market research influences menu prices.
- Discuss institutional and commercial cost control, and controlling food, labor and budget costs.
- Explain controls used in purchasing, receiving, issuing, production, and service of beverages.
- Explain how the trend toward health foods developed, including ethnic, natural, and vegetarian foods; having menu items approved for healthfulness; and offering nutritional information about menu items.
- Analyze how food service may be perceived as a high-risk business.
- Discuss the benefits and drawbacks of owning, renting, and leasing an establishment.

TAH 81 – Independent Studies in Food Service Operations

- Developing and using research skills.
- Developing psycho-social skills.
- Assisting students to develop personally and professionally to create leaders for the tourism and hospitality industry.
- Assisting students to develop basic skills in reading, writing, communication, computation and analysis.

TAH 82 – Cruiseline Marketing and Sales

- Students will have a working knowledge of the cruise line industry, the cruise experience, and how to sell cruises efficiently and effectively.
- Students will learn to effectively manage travel activities for the handicap niche market.

TAH 91 – Professional Portfolio

- Define and comprehend the importance of a Portfolio.
- Identify career skills.
- Resume writing and formats.

- Identify the potential job market. Evaluate the types of positions available that relate to individual's qualifications.
- Practice and understand interview techniques.
- Research.

TAH 92 – Field Experience and Internship

- Comprehend the impact of a resume and its value in a job/internship search.
- Identify tourism and hospitality industry terms, thereby increasing vocabulary related to the tourism industry.
- Identify the personal and communication skills required to succeed in an interview.
- Analyze the various career opportunities available in the tourism and hospitality industry.
- Utilize technology (internet and KCC job boards) as a tool for career development and opportunity.
- Evaluate the strengths, weaknesses, opportunities and threats of being an entrepreneur. Formulate and defend alternative recommendations learned as an outcome of engaging in critical analysis.
- Identify the principles and practices of economic and fiscal responsibility.
- Identify the impact of career assessment testing as a tool for self knowledge.
- Develop an appreciation of the value of good service as a career builder in the Tourism and Hospitality industry.
- Industry field experience in chosen career.