

***IMPORTANT- Reports are in development and may not be accurate.**

Course Status: ▼

Subject: ▼

Total Active Courses: 1619
 Total Pending Courses: 610
 Active Courses With SLOAs: 1573
 Pending Courses With SLOAs: 502
 Active Percentage: 97.16%
 Pending Percentage: 82.30%
 Percentage of Active Courses with SLOAs After Pending Become Active: 6.82%

Course (course status)	Title	Student Learning Outcomes	Assessment
ACCT 100 F (Launched)	Small Business Accounting	Develop and use basic accounting information for daily recording of business financial transactions.	Common questions or problems
		Prepare and use the basic accounting financial statements: a) Income Statement; (b) Statement of Owners' Equity; and (c) Balance Sheet.	Common questions or problems
		Prepare and use a bank reconciliation and a petty cash fund.	Common questions or problems
		Prepare and use accounts receivable and accounts payable subsidiary and control ledgers.	Common questions or problems
ACCT 221 F (Launched)	Corporate, Partnership, Estate and Trust Tax	Identify basics of Federal and California income tax law as it relates to Sole Proprietorships and Partnerships.	Exam or other department standard.
		Use practical knowledge of income tax form preparation and tax compliance process as these relate to sole proprietorships, partnerships and other business entities.	Exam or other department standard.
		Apply income tax laws to sole proprietorships, partnerships and other business entities.	Exam or other department standard.
		Apply income tax laws to Federal Gift, Estate and Trust Taxes	Exam or other department standard.
ANTH 101LF (Launched)	Physical Anthropology Lab	Identify and apply the key terminology, theories, theoretical orientations, methods and perspectives used in physical anthropology.	Common multiple choice or other objective questions in a quiz or exam.
		Identify and describe physical similarities and differences among and between; non-human primates, hominids, and modern Homo Sapiens, using standard methodology.	Common multiple choice or other objective questions in a quiz or exam.
		Apply evolutionary theory, including the four processes of evolution in understanding how evolution works to shape living organisms over time.	Common multiple choice or other objective questions in a quiz or exam.
ANTH 105 F (Launched)	Language and Culture	Identify and apply key terminology, theoretical orientations, principles and methods used in anthropological linguistics as well as recognize and interpret the role of linguistics in anthropologies holistic study of humankind.	Methodology includes objective examination, multiple choice, true and false, and matching.

		Identify and describe the significance of culture and language in influencing and framing peoples worldview.	Methodology includes objective examination, multiple choice, true and false, and matching.
		Describe and integrate the anthropological approach to the study of language; including nonhuman primate language, the origin of language, comparative and descriptive studies of language, sociolinguistic studies, acquisition and applied linguistics.	Methodology includes objective examination, multiple choice, true and false, and matching.
ARCH 124 F (Launched)	Architectural CAD I	Employ the basic skills achieved of computer assisted drafting and design.	exam
		Participate in advanced architectural CAD courses by identifying the components of a CAD System.	exam
ART 112 F (Launched)	Art History: Ancient to Medieval	Identify key works of painting, sculpture, and architecture from ancient Mesopotamian, Egyptian, Greek, Roman, and Gothic cultures.	A list of twelve multiple choice questions will be given to students on the day of the final exam, highlighting they key objects and concepts covered in class. A copy of the written assignment will be kept with instructor for assessment.
		Describe a work of art that they have seen in a local museum or gallery, in a written paper. The written assignment will include: formal analysis, biographical or cultural information, and other pertinent points about the piece.	Written assignment assessed against a department standard.
ART 113 F (Launched)	Art History: Renaissance to Modern	Identify important European works of art by Michelangelo, da Vinci, Rembrandt, Goya, and other seminal figures of European art and architecture.	A list of 12 multiple choice questions, highlighting the most important artists and concepts covered in the course.
		Compose a paper on a work of art that they have seen in a local museum or gallery; the paper will include: formal analysis, biographical information, and iconic investigations.	Written assignment assessed against a department standard.
ART 181 F (Launched)	Drawing from the Masters	Create drawings that demonstrate the understanding of design elements and techniques of classical drawing.	Project assessed against a department standard
		Create drawings in the specific styles of established masters. These drawings will employ contour, cross-contour line, and continuous tone to depict the human figure and its environment.	Project assessed against a department standard
ART 183 F (Launched)	Representational Drawing	Create drawings that represent an accurate interpretation of forms, through an understanding of light logic, surface textures, and atmospheric and linear perspective.	Project assessed against a department standard
		Assemble a portfolio of drawings that explore a variety of media and demonstrate knowledge of historical and contemporary rendering techniques.	Portfolio of student work assessed against a department standard
ART 225 F (Launched)	Illustrating Literature	Plan a long-term illustration project by breaking it down into manageable stages used by professionals.	Through collection of student projects and assessment by instructor, against a department standard.
		Develop many rough variations as options for finished illustrations.	Through collection of student projects and assessment by instructor, against a department standard.
		Finish three pieces in a consistent style for book publication.	Through collection of student projects and assessment by instructor, against a department standard.
ART 280 F (Launched)	Rendering II	Create drawings that represent an accurate interpretation of forms, through	Project assessed against a department standard.

		an understanding of light logic, surface textures, and atmospheric and linear perspective.	
		Create drawings demonstrating knowledge of color, rendering techniques, gridding of artwork, and reproduction of drawings.	Project assessed against a department standard
ART 281 F (Launched)	Drawing from the Masters II	Create drawings that demonstrate the understanding of design elements and drawing techniques of modern masters.	Project assessed against a department standard
		Create drawings in the specific styles of established masters. These drawings will employ contour, cross-contour line, and continuous tone to depict the human figure and its environment.	Projects assessed against a department standard
AUTO 051 F (Launched)	Internship in Automotive	Collaborate with the instructor to develop an Internship Learning Outcomes Contract. This is a compilation of workplace skills that the student will be exposed to and will perform at the internship site.	Collaboration between the faculty supervisor and work supervisor concerning progress of the student towards the Student Learning Outcome Contract resulting in an evaluation rating in each listed skill.
		Compose a written summary of the internship experience.	Instructor will collect the written assignment and review for accuracy and information contained in the Student Learning Outcome Evaluation.
AUTO 060 F (Launched)	Automotive Powertrains	Describe the procedure for replacing the transmission - rear- extension - housing seal and bushing.	Writing Assignment
		Describe the procedure for replacing a complete clutch assembly.	Writing Assignment
AUTO 070 F (Launched)	Engine Reconditioning	Explain how to perform an engine oil pressure test. Include the names of tools and parts associated with this test.	Writing Assignment
		Explain how to replace a cylinder head gasket. Include the names of tools, parts, and inspection procedures associated with this repair.	Writing Assignment
AUTO 073 F (Launched)	Brake Systems Repair	Explain how to replace a brake master cylinder.	written assignment
		Explain how to replace a brake booster.	written assignment
AUTO 081 F (Launched)	Engine Rebuilding and Repair	Explain how to replace an engine timing belt or timing chain. Include the names of parts and the tools used to perform the task.	writing assignment
		Explain how to measure engine main bearing oil clearance. Include the names of parts and the tools used to perform the task.	writing assignment
AUTO 083 F (Launched)	Brake and Suspension Systems Repair	Explain how to replace shock absorbers. Include the names of tools and parts in your written summary of the replacement procedure.	written assignment
		Explain how to replace upper or lower ball joints. Include the names of tools and parts in your written summary of the replacement procedure.	written assignment
AUTO 091 F (Launched)	Cylinder Head Repair	Explain how to resurface a valve face. Include tool names and any required measurements in your explanation.	writing assignment
		Explain how to replace valve guide seals after the cylinder head has been removed from the engine. Include tool names in your explanation.	writing assignment

BIOL 101 F (Launched)	General Biology	Collect and analyze data using standard scientific techniques and methodology.	Various laboratory exercises require the collection and analysis of data.
		Evaluate the relationships between various components of an ecosystem.	Written and oral classroom activities will require the student to evaluate and articulate the interactions occurring between abiotic and biotic components of ecosystems.
		Summarize the relationships between genetic variation, natural selection, and speciation in evolutionary terms.	Various exam questions will require the students to connect small genetic changes with large evolutionary changes, clearly explaining the intervening linkages.
BIOL 109 F (Launched)	Genetics and Biotechnology in Society	Analyze chromosomal and gene inheritance patterns and probabilities, using Punnett squares and pedigree analysis.	Assessment of understanding is based on multiple exams with objective and subjective questions. Students are expected to write clear descriptions and diagram chromosomal inheritance, Punnett squares and pedigrees.
		Demonstrate an understanding of the molecular processes of DNA replication, transcription, and translation, and how these processes are managed in cells.	Assessment of understanding is based on multiple exams with objective and subjective questions. Students are expected to write clear descriptions of course topics, and diagram processes and structures.
		Explain how biotechnology is used for medicinal biologics, gene therapy, and genetically modified organisms.	Assessment of understanding is based on multiple exams with objective and subjective questions. Students are expected to write clear descriptions of course topics, and diagram processes and structures.
BIOL 272 F (Launched)	Cell and Molecular Biology	Apply the processes of scientific inquiry by designing and analyzing experiments in cell and molecular biology.	Students will be evaluated on their organization and written analysis in laboratory notebook and formal lab reports (in the format of a scientific publication).
		Safely and proficiently use basic laboratory equipment, such as microscope, centrifuge, pipets, gel electrophoresis, chromatography columns, spectrophotometers.	Lab practicum and hands-on skills tests on each equipment.
		Identify structures and describe functions of biological molecules and cellular components.	Common questions and problems. Assessment of understanding is based on multiple exams with objective and subjective questions. Students are expected to write clear descriptions of course topics, and diagram processes and structures.
		Compare and contrast cellular processes and interactions between prokaryotes and eukaryotes (including metabolism, reproduction, communication).	Common questions and problems. Assessment of understanding is based on multiple exams with objective and subjective questions. Students are expected to write clear descriptions of course topics, and diagram processes and structures.
		Apply the principles of classical and molecular genetics to solve problems in genetics or biotechnology.	Common questions and problems. Assessment of understanding is based on multiple exams with objective and subjective questions. Students are expected to write clear descriptions of course topics, and diagram processes and structures.
BUS 100 F (Launched)	Introduction to Business	Use a working vocabulary of business terminology.	Common questions or problems
		Identify the various functions of a business enterprise.	Common questions or problems
		Identify the environment in which a	Common questions or problems

		business operates.	
		Identify the impacts a business enterprise can have on the local, regional, national and international economies.	Common questions or problems
BUS 131 F (Launched)	Principles of International Business	Analyze a country from aspects of political economy and culture and evaluate its strengths and weaknesses for the global marketplace.	Project assessed against a department standard
		Apply knowledge of trade theory to evaluate a country's use of instruments, foreign direct investment, and degree of regional/economic integration.	Project assessed against a department standard
		Evaluate a country's exchange, interest, and inflation rates in determining a country's strengths and weaknesses.	Project assessed against a department standard
BUS 162 F (Launched)	Business Economics	Assess macroeconomic issues and their relation to business.	Common questions or problems
		Assess microeconomic issues and their relation to business.	Common questions or problems
		Use a working vocabulary of economic terminology.	Common questions or problems
BUS 228 F (Launched)	Study Abroad Experience	Analyze the differences and similarities between the US and host country.	Group discussions and critical analysis papers.
		Develop a portfolio of reports, speeches, and video presentations highlighting significant areas of their study abroad experience.	The reports, speeches, and video presentations.
		Determine opportunities utilizing the study abroad as the foundation.	The reports, speeches, and video presentations.
BUS 242 F (Launched)	International Business Law	Utilize a working vocabulary of international law terminology.	Common questions or problems
		Identify, describe, and evaluate the relationship of subjects, sources, and objects in international law.	Common questions or problems
		Name, categorize, and contrast the elements of statehood and the most common forms of reparation available to states in an international setting.	Common questions or problems
BUS 295 F (Launched)	Business Internship	Apply workplace skills in business or industry internships including: communication, personal behavior, and specific skills as required.	Assessed by department standard.
		Prepare a professional resume that demonstrates the skills and knowledge garnered by the student so that they may obtain gainful employment in the field of business.	Assessed by department standard.
BUS 296 F (Launched)	Business Internship II	Apply workplace skills in business or industry internships including: communication, personal behavior, and specific skills as required.	Assessed by department standard.
		Prepare a professional resume that demonstrates the skills and knowledge garnered by the student so that they may obtain gainful employment in the field of business.	Assessed by department standard.
BUS 297 F (Launched)	Business Internship III	Apply workplace skills in business or industry internships including: communication, personal behavior, and specific skills as required.	Assessed by department standard.
		Prepare a professional resume that demonstrates the skills and knowledge	Assessed by department standard.

		garnered by the student so that they may obtain gainful employment in the field of business.	
BUS NO1 F (Launched)	Business/Computer Skills Lab		
CDES 230 F (Launched)	Early Childhood Education Administration: Business Models and Practices	Create policies and procedures including the forms necessary for implementation for a child development center and devise an annual budget to include vehicles for alternative payment.	Exams, in-class exercises, projects and papers, and presentations.
		Compose a one-year marketing plan and design a health and safety manual.	Exams, in-class exercises, projects and papers, and presentations.
		Demonstrate ability to administrate an early childhood education program.	Exams, in-class excercises, projects and papers, and presentations.
CDES 261 F (Launched)	Introduction to Elementary Classroom Teaching	Assess the role of the elementary teacher in terms of philosophies and theories of learning, content standards, professional, legal and ethical issues, implications of family, culture, gender, diversity, and the needs of English learners and special populations, educational technologies and terminology in the contemporary California classroom.	Participation in class discussions, as evidenced by presence, attentiveness, appropriateness of contribution, and advancement in level participation in discussions. Essay and/or objective testing, electronic portfolio and in-class written assignments.
		Summarize the scope and sequence of curriculum planning, including writing lesson plans using the California Standards of the Teaching Profession.	Written lesson plans using curriculum for the student's grade level, working with state standards.
		Apply experience gained through classroom observation to synthesize the content of the course with their perceptions about teaching.	Written reflective essays.
CDES 261LF (Launched)	Introduction to Elementary Classroom Teaching: Observation	Design, present and evaluate elementary learning activities based on observation and participation experiences in the elementary classroom.	1) Teach a lesson plan 2) Create an electronic portfolio demonstrating the scope of the lab experience.
		Generate and demonstrate personal and professional confidence needed for classroom participation.	Reflective essay to include self-evaluation of personal and professional growth.
CIS 100HF (Launched)	Honors Introduction to Personal Computers	Use Microsoft Word to create and edit professional business documents that include formatting, styles, and graphics.	Common questions or problems measured against a department standard.
		Use Microsoft Excel to create and edit professional spreadsheets that use basic formulas, graphs, and sensitivity analysis.	Common questions or problems measured against a department standard.
		Use Microsoft PowerPoint to create and deliver a presentation that includes designs, transitions, and graphics.	Common questions or problems measured against a department standard.
		Use Access to develop an database table and search for information in the table	Common questions or problems measured against a department standard.
CIS 182 F (Launched)	Computer Certification Preparation II	Examine, troubleshoot and solve problems associated with a personal computer and computer software.	When presented with a set of software configuration details and a list of of personal computer problems, is able to successfully configure and fix the computer software.
		Perform an installation and configuration of a personal computer operating system.	When presented with a blank personal computer, operating system media, and a set of configuration parameters the student can successfully install and configure the operating system software.
		Assess and monitor the security of a computer and fix security problems.	When presented with a set of computer security configuration details is able to successfully secure a personal computer.

CIS 298 F (Launched)	Advanced Computer Topics	Use a working vocabulary of topic-related computer information systems terminology.	Common questions or problems.
		Apply computer information systems principles to formulate a strategy for success in the topic-related area.	Essay/writing assignment assessed against a department standard.
		Evaluate topic-related issues that must be resolved and/or implemented.	Common questions or problems.
COSM 043AF (Launched)	Advanced Makeup - Microdermabrasion		
COSM 043BF (Launched)	Advanced Exfoliation-Microdermabrasion		
COSM 043CF (Launched)	Advanced Makeup-Air Brush		
COSM 055CF (Launched)	Cosmetology: Level 3	Explain and demonstrate the steps and massage techniques used during a facial treatment to maintain the health of the skin.	The successful student will be able to perform the step-by-step facial treatment procedure to indicate adequate skills necessary for skin care services.
		Demonstrate the knowledge and ability to sculpt mid-length and short forms to create a square form.	The successful student will be able to sculpt mid-length and short forms to create a square form on a live model.
COSM 055EF (Launched)	Cosmetology: Level 5	Perform the practical procedures mandated by the California State Board of Barbering and Cosmetology, the "CIB (Candidate Information Bulletin), and "The Barbering and Cosmetology Act / Rules and Regulations", in preparation for the practical portion of the California State Board of Barbering and Cosmetology licensing examination.	Performance exams, mock boards, and laboratory procedures.
		Master knowledge acquired in Levels 1, 2, 3, and 4, i.e. hair, skin, and nails in preparation for the written portion of the California State Board of Barbering and Cosmetology licensing examination.	Complete written exams and quizzes.
		Practice advanced techniques, customer service, and behavioral strategies expected for success in the Cosmetology industry.	Complete client record cards, and administer client surveys on student performance.
COSM 060LF (Launched)	Instructional Techniques in Cosmetology/Barbering/Esthetician Laboratory	Develop skills in the methodology of class instruction and evaluation of Cosmetology students.	Laboratory summary essay.
		Develop methods of becoming a more effective communicator, educator, motivator and facilitator.	Laboratory portfolio.
COSM 061LF (Launched)	Intermediate Instructional Techniques in Cosmetology/Barbering/Esthetician Laboratory	Demonstrate intermediate knowledge of the methodology of class instruction and evaluation of students.	Laboratory summary essay.
		Demonstrate an understanding of the Rules and Regulations issued by the State Board of Barbering and Cosmetology to train students to pass the written and practical state exam.	Laboratory portfolio.
COSM 062LF (Launched)	Advanced Instructional Techniques in Cosmetology/Barbering/Esthetician Laboratory	Demonstrate advanced knowledge of the methodology of class instruction and evaluation of students.	Laboratory summary essay.
		Model skills and show correct step-by-step advanced procedures that students will be expected to perform.	Laboratory portfolio.
COSM 070 F (Launched)	Continuing Education Instruction Tech-Cosmetology	Organize and apply knowledge necessary to satisfy the State Board of Barbering and Cosmetology	The successful student will develop lesson plans, exams, written tests and assignments and demonstrate classroom

		requirements of 30 hours for Teacher License renewal.	presentations with a cumulative average grade of "C" or better.
		Observe students in a classroom setting.	The successful student will develop lesson plans, exams, written tests and assignments and demonstrate classroom presentations with a cumulative average grade of "C" or better.
		Design and create various instructional methodologies during lecture and perform practical demonstrations.	The successful student will develop lesson plans, exams, written tests and assignments and demonstrate classroom presentations with a cumulative average grade of "C" or better.
		Demonstrate and evaluate practical procedures mandated by the Board of Barbering and Cosmetology, the Cosmetology Performance Criteria, the Barbering and Cosmetology Act and the Rules and Regulations.	The successful student will develop lesson plans, exams, written tests and assignments and demonstrate classroom presentations with a cumulative average grade of "C" or better.
		Assume responsibility for personal integrity, poise, proper grooming and exhibit self-confidence in order to be a successful Instructor.	The successful student will develop lesson plans, exams, written tests and assignments and demonstrate classroom presentations with a cumulative average grade of "C" or better.
		Employ a positive attitude and good verbal communication with students and staff.	The successful student will develop lesson plans, exams, written tests and assignments and demonstrate classroom presentations with a cumulative average grade of "C" or better.
COUN 140 F (Launched)	Educational Planning	Identify a minimum of two colleges or universities that offer a specific major of interest.	Writing assignment
		Complete a Student Educational Program Plan (SEPP) that outlines the courses required for students to meet their academic/career objective.	Writing assignment
CRTV 290 F (Launched)	Internship in Communications I	Compose a career plan based on their internship experience.	Instructor will collect written career plan and evaluate for correct and complete information in the areas of education, entry level positions and professional recommendations.
		Compose a radio, television or film industry appropriate resume and cover letter.	Instructor will collect resume and cover letter and review for correct format, grammar, and effectiveness.
DANC 103 F (Launched)	Dance Technique I	Examine the proper application of body alignment and perform dance exercises.	Perform dance exercises acquired in class.
		Assemble and arrange steps acquired in class in a dance sequence.	Perform choreographed dance sequence.
		Compose an original paper based on the viewing of a dance concert and determine the value of dance for entertainment.	Attend a dance concert designed for entertainment.
DANC 104 F (Launched)	Dance Technique II	Analyze and apply techniques for proper body alignment.	The student will be tested on their performance of alignment exercises learned in class.
		Demonstrate the ability to perform choreographed dance movements and to choose the correct application of acquired dance techniques.	The student will be tested on their performance of a choreographed dance
		Demonstrate an understanding of the field of dance and the ability to analyze and criticize dance in performance.	Written critique of a college or professional dance concert.
DANC 130 F (Launched)	Afro-Caribbean Dance	Demonstrate an understanding of the various poly-rhythms associated with	The student will be tested on the performance of an Afro-Caribbean dance

		Afro-Caribbean dance.	while staying on the beat of a poly-rhythmic piece of music.
		Demonstrate the ability to perform choreographed Afro-Caribbean dance movements.	The student will be tested on the performance of a choreographed Afro-Caribbean dance.
		Demonstrate an understanding of the field of dance by critically analyzing a live dance concert.	The student will write a four page critique of the Fullerton College Faculty Dance Concert.
DRAF 070 F (Launched)	Blueprint Reading for the Metal Trades	Upon successful completion of DRAF 070 F, the student will describe a geometric symbol on a blueprint	exam
		Upon successful completion of DRAF 070 F, the student will be able to identify a Center linetype on a blueprint	exam
DRAF 101 F (Launched)	Blueprint Reading for Manufacturing	Describe a geometric symbol on a blueprint.	Examination
		Identify a Center-line type on a blueprint.	Examination
DRAF 140 F (Launched)	AutoCAD For Industry	Create an Array to complete a Bolt Hole Pattern	exam
		Produce a hard copy print of a drawing to scale	exam
DRAF 141 F (Launched)	Advanced CAD for Industry	Create a template drawing incorporating the use of Paperspace with assigned settings and scales	exam
		Create a linkable assembly table	exam
DRAF 143 F (Launched)	3D Applications Using AutoCAD	Create a solid model using the Extrude command	exam
		Select mass property data from a solids model	exam
DRAF 171 F (Launched)	Fundamentals of Drafting	Create a layout with a Title block	exam
		Create an Ellipse using manual drafting tools	exam
DRAF 173 F (Launched)	Geometric Dimensioning and Tolerancing	Identify a Perpendicular symbol	exam
		Calculate a hole grouping to determine if they are in tolerance	exam
DRAF 944 F (Launched)	Solidworks	Create a detailed hole using the Hole Wizard in a solid body	exam
		Apply and align two parts parallel using the Mates function	exam
DRAF 945 F (Launched)	Advanced Solidworks	Analyze quantitative information, including attributes and volumetric mass properties of 3D model database geometry.	Exam
		Create all required detail drawings including any necessary views, dimensions, and tolerances.	Exam
ECON 101 F (Launched)	Principles of Economics - Micro	Diagram the supply/demand model to analyze and evaluate individual market outcomes.	Multiple choice, true-false, and/or short-answer items on final exams.
		Illustrate quantitative reasoning skills.	Multiple choice, true-false, and/or short-answer items on final exams.
		Connect the principles of marginal analysis to the study of consumer and firm behavior.	Multiple choice, true-false, and/or short-answer items on final exams.
		Identify and differentiate the four primary market structures and evaluate the various outcomes resulting from each.	Multiple choice, true-false, and/or short-answer items on final exams.
		Analyze the costs and benefits of government intervention in various	Multiple choice, true-false, and/or short-answer items on final exams.

		market settings.	
ECON 101HF (Launched)	Honors Principles of Economics - Micro	Diagram the supply/demand model to analyze and evaluate individual market outcomes.	Multiple choice, true-false, and/or short-answer items on final exams.
		Illustrate quantitative reasoning skills.	Multiple choice, true-false, and/or short-answer items on final exams.
		Connect the principles of marginal analysis to the study of consumer and firm behavior.	Multiple choice, true-false, and/or short-answer items on final exams.
		Identify and differentiate the four primary market structures and evaluate the various outcomes resulting from each.	Multiple choice, true-false, and/or short-answer items on final exams.
		Analyze the costs and benefits of government intervention in various market settings.	Multiple choice, true-false, and/or short-answer items on final exams.
ECON 102 F (Launched)	Principles of Economics-Macro	Assess, organize, evaluate, analyze, and synthesize economic data from a variety of sources and present the information appropriately in graphs, tables, charts, or figures to support written or oral arguments.	Multiple choice, true-false, and/or short-answer items on final exams.
		Identify, discuss, compare, and contrast market failures to provide efficient outcomes in product, factor, and financial markets with similar failures of government agencies to provide efficient outcomes through regulation.	Multiple choice, true-false, and/or short-answer items on final exams.
		Identify and assess fiscal and monetary policy options and evaluate their impact on economic growth, price stability, efficiency, and equity.	Multiple choice, true-false, and/or short-answer items on final exams.
		Describe the structure of the Federal Reserve System and financial institutions and analyze their role in the stability of the overall economy.	Multiple choice, true-false, and/or short-answer items on final exams.
		Use the aggregate demand/aggregate supply model to predict likely changes in the overall macro economy.	Multiple choice, true-false, and/or short-answer items on final exams.
ECON 102HF (Launched)	Honors Principles of Economics-Macro	Assess, organize, evaluate, analyze, and synthesize economic data from a variety of sources and present the information appropriately in graphs, tables, charts, or figures to support written or oral arguments.	Multiple choice, true-false, and/or short-answer items on final exams.
		Identify, discuss, compare, and contrast market failures to provide efficient outcomes in product, factor, and financial markets with similar failures of government agencies to provide efficient outcomes through regulation.	Multiple choice, true-false, and/or short-answer items on final exams.
		Identify and assess fiscal and monetary policy options and evaluate their impact on economic growth, price stability, efficiency, and equity.	Multiple choice, true-false, and/or short-answer items on final exams.
		Describe the structure of the Federal Reserve System and financial institutions and analyze their role in the stability of the overall economy.	Multiple choice, true-false, and/or short-answer items on final exams.
		Use the aggregate demand/aggregate supply model to predict likely changes in the overall macro economy.	Multiple choice, true-false, and/or short-answer items on final exams.
ENGL 059 F (Launched)	Developmental Writing	Discuss main ideas and supporting	Essay/writing assignment assessed against

		points in pre-college level texts.	a department standard
		Compose an essay focused by a thesis statement and developed support from at least one course reading.	Essay/writing assignment assessed against a department standard
		Employ various sentence structures appropriately in their essays and produce sentences relatively free from major grammatical errors.	Essay/writing assignment assessed against a department standard
		Adopt academic success strategies, such as using campus resources.	Common questions or problems
ENGL 101 F (Launched)	Enhanced College Writing	Compose a focused essay that consistently and fully develops a clear thesis.	Essay/writing assignment assessed against a department standard
		Use sufficient information from outside sources to develop their essays.	Essay/writing assignment assessed against a department standard
		Integrate information and ideas from sources effectively in their own writing.	Essay/writing assignment assessed against a department standard
		Conform to the conventions of the MLA documentation system.	Essay/writing assignment assessed against a department standard
		Employ strategies for success in college.	tk
ENGL 223 F (Launched)	World Literature		
ESL 025 F (Launched)	Basic English Grammar for Non-Native Speakers	Recognize basic errors in sentences.	Multiple choice test
		Write simple affirmative, negative, and interrogatory sentences using present and past tenses.	Writing assignment assessed against a department standard
ESL 029 F (Launched)	Idiomatic Expressions for Non-Native Speakers	Recognize relaxed speech, including common American idioms and phrasal verb expressions.	Multiple choice test
		Use dictionaries to determine the meaning of idiomatic expressions.	Multiple choice test
ESL 035 F (Launched)	Intermediate English Grammar for Non-Native Speakers	Use a variety of verb tenses accurately in sentences and paragraphs.	Multiple choice test
		Write sentences using adverb clauses.	Multiple choice test
ESL 036 F (Launched)	Basic Conversation	Use oral language to ask and answer simple questions in paired situations.	Skills demonstration or performance assessed against a department standard.
		Respond appropriately to basic statements, questions, requests, and instructions.	Skills demonstration or performance assessed against a department standard.
ESL 038 F (Launched)	Fundamentals of American English Pronunciation for Non-Native Speakers	Produce basic sound discrimination sets (voiced and unvoiced, stops and continuants, points of articulation, etc.).	Skills demonstration or performance assessed against a department standard
		Produce simple intonation patterns in phrases and sentences.	Skills demonstration or performance assessed against a department standard
ESL 039 F (Launched)	Vocabulary Expansion Techniques for Non-Native Speakers	Demonstrate comprehension of vocabulary necessary in general everyday contexts.	Multiple choice test
		Demonstrate knowledge of appropriate word meaning.	Multiple choice test
ESL 045 F (Launched)	Advanced English Grammar for Non-Native Speakers	Identify complex verb tenses and use them appropriately in sentences and paragraphs.	Multiple choice test
		Construct sentences using sophisticated syntactic structure.	Multiple choice test
ESL 046 F (Launched)	Intermediate Conversation for Non-Native Speakers	Use oral language to initiate and sustain conversations on everyday topics.	Skills demonstration or performance assessed against a department standard
		Respond appropriately to complex questions, requests, and instructions.	Skills demonstration or performance assessed against a department standard
ESL 047 F (Launched)	Academic Preparation for Non-Native Speakers	Follow basic, spoken classroom instructions.	Multiple-choice test
		Use an all-English dictionary to identify	Multiple-choice test

		parts of speech, and definitions.	
ESL 048 F (Launched)	Intermediate Pronunciation for Non-Native Speakers	Identify and use basic sound discrimination sets (voiced and unvoiced, stops and continuants, point of articulation, etc.).	Multiple choice test
		Identify and produce stress patterns in multi-syllable words.	Skills demonstration or performance assessed against a department standard
ESL 056 F (Launched)	Advanced Conversation for Non-Native Speakers	Prepare and perform a short speech.	Skills demonstration or performance assessed against a department standard
		Exhibit ability to take notes from authentic lectures or presentations at an advanced level.	Skills demonstration or performance assessed against a department standard
ESL 058 F (Launched)	Advanced Pronunciation for Non-Native Speakers	Distinguish between and demonstrate sound discrimination sets (voiced and unvoiced, stops and continuants, point of articulation).	Skills demonstration or performance assessed against a department standard
		Manipulate oral muscles for accent reduction.	Skills demonstration or performance assessed against a department standard
ESL 080 F (Launched)	Fundamental Listening, Speaking, Reading and Writing	Upon successful completion of ESL 080 F Fundamental English for Non-Native Speakers, students will be able to demonstrate understanding of main ideas and basic vocabulary in short factual readings.	Common questions or problems
		Upon successful completion of ESL 080 F Fundamental English for Non-Native Speakers, students will be able to compose short pieces of guided written expression using correct spelling and capitalization.	Essay/writing assignment assessed against a department standard
		Upon successful completion of ESL 080 F Fundamental English for Non-Native Speakers, students will be able to use simple and progressive tenses in present and past in affirmative, negative, and interrogative sentences.	Common questions or problems
		Upon successful completion of ESL 080 F Fundamental English for Non-Native Speakers, students will be able to follow basic oral instructions, requests, questions, and commands.	Common questions or problems
ESL 081 F (Launched)	Low Intermediate English for Non-Native Speakers of English	Upon successful completion of ESL 081 F Low Intermediate English for Non-Native Speakers of English, the student will be able to identify main ideas and supporting details in low-intermediate passages.	Multiple choice test
		Upon successful completion of ESL 081 F Low Intermediate English for Non-Native Speakers of English, the student will be able to compose a short paragraph applying basic punctuation and capitalization rules.	Writing assignment assessed against a department standard
		Upon successful completion of ESL 081 F Low Intermediate English for Non-Native Speakers of English, the student will be able to use past tenses in simple and progressive forms.	Writing assignment assessed against a department standard
		Upon successful completion of ESL 081 F Low Intermediate English for Non-Native Speakers of English, the student will be able to respond appropriately to oral instructions and questions.	Multiple choice test
ESL 082 F (Launched)	Intermediate English for Non-	Upon successful completion of ESL 082	Multiple choice test

	Native Speakers of English	F Intermediate English for Non-Native Speakers of English, the student will be able to identify main ideas and supporting details in intermediate level passages.	
		Upon successful completion of ESL 082 F Intermediate English for Non-Native Speakers of English, the student will be able to compose an 8-12 sentence paragraph with a topic sentence, supporting details, and concluding sentence.	Writing assignment assessed against a department standard
		Upon successful completion of ESL 082 F Intermediate English for Non-Native Speakers of English, the student will be able to use simple, compound, and complex sentences.	Writing assignment assessed against a department standard
		Upon successful completion of ESL 082 F Intermediate English for Non-Native Speakers of English, the student will be able to participate in class discussions by asking and answering questions on general and academic topics.	Skills demonstration or performance assessed against a department standard
ESL 184 F (Launched)	Low Advanced Reading and Writing for Non-Native Speakers	Summarize the main and supporting points of an article.	Writing assignment assessed against a department standard
		Compose an expository essay containing a simple thesis and 2-3 body paragraphs developed with personal knowledge and experience.	Essay assignment assessed against a department standard
		Use connecting words appropriately and effectively.	Essay assignment assessed against a department standard
ESL 185 F (Launched)	Advanced Reading and Writing for Non-Native Speakers	Summarize academic texts.	Essay assignment assessed against a department standard
		Compose a thesis-based expository essay developed with information from assigned readings.	Essay assignment assessed against a department standard
		Use adjective and noun clauses effectively in sentences.	Essay assignment assessed against a department standard
ETHS 235 F (Launched)	Contemporary Social Justice Movements	Compare and contrast the strategies employed in various movements to achieve social justice.	Common questions or problems embedded in a final; or essay/writing assignment or portfolio or project assessed against a department standard; and/or optional skills demonstration or performance assessed against a department standard (varies by instructor); and/or optional speech or presentation assessed against a department standard (varies by instructor).
		Compare and contrast the outcomes of various social justice movements to assess their effectiveness.	Common questions or problems embedded in a final; or essay/writing assignment or portfolio or project assessed against a department standard; and/or optional skills demonstration or performance assessed against a department standard (varies by instructor); and/or optional speech or presentation assessed against a department standard (varies by instructor).
		Analyze the effectiveness of social justice movements in their attempts to challenge racism, sexism, classism, homophobia and other institutional forms of oppression.	Common questions or problems embedded in a final; or essay/writing assignment or portfolio or project assessed against a department standard; and/or optional skills demonstration or performance assessed against a department standard (varies by instructor); and/or optional speech or

			presentation assessed against a department standard (varies by instructor).
FASH 010 F (Launched)	Clothing Construction Studio	Upon successful completion of FASH 010 F Clothing Construction Studio, the student will be able to demonstrate their ability to create a fashion garment utilizing open fashion design lab.	The successful student will create a garment by selecting the appropriate fabric for a commercial pattern that meets the industry standards.
FASH 145 F (Launched)	Field Studies in Fashion	Compare and contrast job responsibilities at an field trip.	Written report
		Explain the organizational structure of fashion field site.	Written report
FASH 196 F (Launched)	Domestic and International Fashion Studies	Identify fashion capitols of the world.	Written Report
		Prepare a fashion report on the site.	Project
		Explain and report on the chosen fashion area during the trip.	Oral Presentation
FASH 199 F (Launched)	Fashion Independent Study	Create a special independent driven fashion project.	Produce work related to an independent study of fashion.
FASH 240 F (Launched)	Introduction to Fashion Styling and Current Topics in Fashion	Create a 'look' for a photoshoot	Project
		Compile a professional stylist kit	Project
		Develop a look book for portfolio	Project
		Write about the most current topic in fashion	Written essay
FASH 243 F (Launched)	Theatrical Costume Construct	Upon successful completion of FASH 243 F, the student will be able to construct a boned bodice.	project
		Upon successful completion of FASH 243 F, the student will be able to design a tutu.	project
FASH 299 F (Launched)	Fashion Industry Internship (FY 2016)	Secure an industry internship.	Instructor will evaluate student's knowledge through a written assignment.
		Compose a career plan based on their internship experience.	Instructor will collect the written career plan and evaluate for correct and complete information in the areas of education, entry level positions and professional recommendations.
FASH 976 F (Launched)	Men's Patternmaking	Create a men's 5 piece jacket pattern.	Project
		Create a men's shirt pattern with a sleeves.	Project
HIST 270 F (Launched)	Women in United States History	Identify the major chronology of people, places, and events of the women studied.	Assess through objective test or essay or research paper.
		Identify an historian's thesis or main point.	Assess through objective test or essay or research paper.
		Evaluate sources beyond the textbook, for instance primary sources and other secondary sources.	Assess through objective test or essay or research paper.
JOUR 101 F (Launched)	Reporting and Writing	Compose and revise a simple news story with a compelling lead, adequate sourcing and context, clear transitions and a minimal number of technical writing errors.	The successful student will create and edit a news article earning a grade of "C" or better.
		Discuss and apply broad libel, privacy and ethical guidelines to common reporting situations.	This will be assessed though an exam question.
		Recall and comply with the basic Associated Press style guidelines.	The successful student will earn a cumulative grade of "C" or better on the Associated Press Style quiz.
JOUR 108 F (Launched)	Feature Writing	Write critically, persuasively, and descriptively; identify and develop a	The successful student will earn a cumulative grade of "C" or better on

		theme and use narrative and dialogue when appropriate.	evaluations of assigned story and in-class exams.
		Organize and write in-depth stories in a timely manner and under deadline pressure.	The successful student will complete assigned stories and in-class exercises with a cumulative grade of "C" or better.
JOUR 126 F (Launched)	Advertising Copy & Layout		
JOUR 140 F (Launched)	Public Relations/Publicity	Identify proper elements of a basic media kit	Creation of a basic media kit along with a comprehensive exam, both with a grade of "C" or better.
		Construct a well crafted press release.	Creation of a press release.
JOUR 150 F (Launched)	Social Media Communications	Identify and produce accurate and compelling social media posts in a timely manner and under deadline pressure.	Skills demonstration or performance assessed against a department standard.
		Explain and use data analytics tools.	Skills demonstration or performance assessed against a department standard.
JOUR 210 F (Launched)	Multimedia Reporting	Create a multimedia news story by incorporating print, broadcast and web reporting skills.	Complete written exams and create assigned journalistic, multimedia stories with a cumulative grade of "C" or better.
		Construct a written news story for the electronic news media including: television, radio and web.	Complete written exams and create assigned multimedia news stories with a cumulative grade of "C" or better.
JOUR 215 F (Launched)	UAV/Drone Reporting	Identify and explain the various parts and of a drone and their usage.	Exam
		Properly employ and execute various operations of a drone.	Assignment and presentation
		Create multimedia article consisting of words, and aerial photography or videography.	Completion of assignment.
JOUR 220 F (Launched)	Introduction to Investigative Reporting	Produce a local watchdog article in a timely manner and under deadline pressure.	Writing assignment assessed against a department standard.
		Perform a data analysis in a timely manner and under deadline pressure.	Skills demonstration or performance assessed against a department standard.
JOUR 221 F (Launched)	Introduction to Visualizing Data	Analyze a basic data set and produce a visualization.	Skills demonstration or performance assessed against a department standard.
		Compile key findings and summarize them in a clear, concise and logical manner.	Writing assignment assessed against a department standard.
MACH 010 F (Launched)	Machining Skills Lab	Organize tools and materials for machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare machine tools for operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Demonstrate proficiency in machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a

			minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 040 F (Launched)	CNC Wire EDM Prog & Operations	Upon successful completion of this course the student should be able to; Explain fundamental set-up procedures related to work-pieces, fixtures, axis positioning and control features of wire electrical discharge machines (EDM).	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of this course the student should be able to; Demonstrate the ability to set-up and make parts on a wire EDM machine that conform to engineering drawing specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of this course the student should be able to; Prepare working numerical control programs for cutting parts using two axis wire EDM machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 043 F (Launched)	Advanced Topics in Machine Technology	Upon successful completion of MACH 043 F, the student will be able to analyze machine part drawings and determine appropriate manufacturing process as covered in the subject matter	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 043 F, the student will be able to Design and create work holding devices for automatic and CNC equipment as covered in the subject matter.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 043 F, the student will be able to prepare NC programs for machine tools, and automatic devices as covered in the subject matter.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 050 F (Launched)	CNC Programming Using Mastercam	Upon successful completion of MACH 050 F, CNC Programming Using Mastercam, the student will be able to organize and construct geometry of machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of

			total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 050 F, CNC Programming Using Mastercam the student will be able to select tools for machining operations and organize tool-paths to meet specifications for machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 050 F, CNC Programming Using Mastercam the student will be able to prepare numerical control programs for both CNC milling and turning machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 052 F (Launched)	Advanced CNC Programming Using Mastercam	Upon successful completion of MACH 052 F, Advanced CNC Programming Using Mastercam, the student will be able to organize and construct geometry of 3d model parts for machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 052 F, Advanced CNC Programming Using Mastercam, the student will be able to select tools for the removal of material and toolpaths for rough and finish machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 052 F, Advanced CNC Programming Using Mastercam, the student will be able to prepare numerical control programs for CNC machine tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 060 F (Launched)	CNC Programming Using SURFCAM	Upon the successful completion of MACH 050 F the student will be able to organize and construct geometry of machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon the successful completion of MACH 050 F the student will be able to select tools for machining operations and organize tool-paths to meet specifications for machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.

		Upon the successful completion of MACH 050 F the student will be able to prepare numerical control programs for both CNC milling and turning machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 086 F (Launched)	CNC Machine Set-up & Operation	Upon successful completion of MACH 086 F CNC Machine Set-up & Operation the student will be able to identify different types of computer numerical machinery, their axis systems, control features, positioning systems, tooling and cutting tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 086 F CNC Machine Set-up & Operation the student will be able to demonstrate the ability to set fixture offsets, tool length offsets, geometry and wear offsets to manufacture parts to blueprint specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 086 F CNC Machine Set-up & Operation the student will be able to organize cutting tools, set-up documentation and numerical control programs to successfully set-up computer numerical controlled machinery.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 087 F (Launched)	CNC Parts Programming	Upon successful completion of MACH 087 F CNC Parts Programming the student will be able to solve mathematical calculations necessary to determine part feature locations of machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 087 F CNC Parts Programming the student will be able to select appropriate canned cycles and sub-programs for turning and milling applications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 087 F CNC Parts Programming the student will be able to prepare computer numerical control programs for CNC turning and milling machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 088 F (Launched)	Advanced CNC Machining	Upon Successful completion of MACH 088 F Advanced CNC Machining the	Using a course rubric faculty will access outcomes by determining student

		<p>student will be able to analyze machine part drawings, determine appropriate manufacturing processes utilizing computer numerical controlled machinery.</p>	<p>performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon Successful completion of MACH 088 F Advanced CNC Machining the student will be able to design and create work-holding devices to manufacture parts on computer numerical controlled milling and turning machines.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon Successful completion of MACH 088 F Advanced CNC Machining the student will be able to prepare numerical control programs from blueprint drawings that meet specifications.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
MACH 090 F (Launched)	Multiple Axis CNC Set and Operation	<p>Upon the successful completion of MACH 089 F the student will be able to analyze machine part drawings and determine appropriate manufacturing process for computer numerical control machines with four and five axis of control.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon the successful completion of MACH 089 F the student will be able to design and create work-holding device to manufacture parts with four and five axis machine tools.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon the successful completion of MACH 089 F the student will be able to prepare CNC programs from blueprints for machines with four and five axis of control.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
MACH 091 F (Launched)	Introduction to Machine Tools	<p>Upon successful completion of MACH 091 F the student will be able to interpret basic engineering drawings related to machining processes.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon successful completion of MACH 091 F the student will be able to solve mathematical calculations necessary for machining processes.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology</p>

			<p>vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon successful completion of MACH 091 F the student will be able to demonstrate basic procedures for the set-up and operation of engine lathes, milling machines, surface grinders and support equipment.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon successful completion of MACH 091 F the student will be able to select appropriate measuring tools to evaluate machined parts to blueprint specifications.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
MACH 092 F (Launched)	Intern Machine Tools	<p>Upon successful completion of MACH 092 F the student will be able to; Interpret engineering drawings related to machining processes.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon successful completion of MACH 092 F the student will be able to; Determine appropriate order of machining operations for the successful completion of parts to blueprint specifications.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon successful completion of MACH 092 F the student will be able to; Select measuring tools to evaluate machined parts.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
		<p>Upon successful completion of MACH 092 F the student will be able to; Demonstrate intermediate procedures for set-up and operation of engine lathes, milling machines, surface grinders and support equipment.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.</p>
MACH 093 F (Launched)	Advanced Machine Tools	<p>Upon successful completion of MACH 093 F the student will be able to; Interpret engineering drawings related to the machining process.</p>	<p>Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a</p>

			minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 093 F the student will be able to; Determine operational sequences, selection of machine tools, work-holding devices and cutting tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Upon successful completion of MACH 093 F the student will be able to; Demonstrate set-up and operation of machined parts that fit together in assemblies. Machinery used includes engine lathes, milling machines, grinders and CNC equipment.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 098AF (Launched)	Machining Skills Lab		
MACH 101 F (Launched)	Introduction to Machine Tools	Interpret basic engineering drawings related to machining processes.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Solve mathematical calculations necessary for machining processes.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select appropriate measuring tools to evaluate machined parts to blueprint specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Demonstrate basic procedures for the set-up and operation of engine lathes, milling machines, surface grinders and support equipment.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 102 F (Launched)	Intermediate Machine Tools	Interpret engineering drawings related to machining processes.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of

			total course points earned as a result of written examinations and practicums.
		Determine appropriate order of machining operations for the successful completion of parts to blueprint specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select measuring tools to evaluate machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Demonstrate intermediate procedures for set-up and operation of engine lathes, milling machines, surface grinders and support equipment.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 103 F (Launched)	Advanced Machine Tools	Interpret engineering drawings related to the machining process.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Determine operational sequences, selection of machine tools, work-holding devices and cutting tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Demonstrate set-up and operation of machined parts that fit together in assemblies. Machinery used includes engine lathes, milling machines, grinders and basic CNC equipment.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 104 F (Launched)	Advanced Topics in Machine Technology	Analyze machine part drawings and determine appropriate manufacturing process as covered in the subject matter.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.

		Identify new and advanced methods and concepts in machine tool repair and maintenance as covered in the subject matter.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Use conventional and current tooling and machining technology as covered in the subject matter.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 110 F (Launched)	CNC Machine Set-Up and Operation	Identify different types of computer numerical machinery, their axis systems, control features, positioning systems, tooling and cutting tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Demonstrate the ability to set fixture offsets, tool length offsets, geometry and wear offsets to manufacture parts to blueprint specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Organize cutting tools, set-up documentation and numerical control programs to successfully set-up computer numerical controlled machinery.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 115 F (Launched)	CNC Parts Programming	Solve mathematical calculations necessary to determine part feature locations of machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select appropriate canned cycles and sub-programs for turning and milling applications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare computer numerical control programs for CNC turning and milling	Using a course rubric faculty will access outcomes by determining student

		machines.	performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 116 F (Launched)	Machine Tools	Interpret basic engineering drawings related to the machining process.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Demonstrate basic procedures for the set-up and operation of engine lathes, milling machines, surfaces grinders and support equipment.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select appropriate measuring tools to evaluate machined parts to blueprint specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 120 F (Launched)	Advanced CNC Machining	Analyze machine part drawings, determine appropriate manufacturing processes utilizing computer numerical controlled machinery.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Design and create work-holding devices to manufacture parts on computer numerical controlled milling and turning machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare numerical control programs from blueprint drawings that meet specifications.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 130 F (Launched)	Multiple Axis CNC Set and Operation	Analyze machine part drawings and determine appropriate manufacturing process for computer numerical control	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology

		machines with four and five axis of control.	vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Design and create work-holding device to manufacture parts with four and five axis machine tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare CNC programs from blueprints for machines with four and five axis of control.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 140 F (Launched)	Basic CNC Swiss Style Lathe Set-up and Operation	Interpret basic engineering drawings related to the CNC Swiss Style lathe machining processes.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Perform mathematical calculations related to the CNC Swiss Style lathe machining application.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select and utilize various inspection instruments necessary to compare engineering specifications to actual machined dimensions.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Set up and perform fundamental operational procedures on the CNC Swiss Style Lathe to tolerances ranging from plus or minus.010 to plus or minus.002.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 142 F (Launched)	Advanced CNC Swiss Style Lathe Set-up and Operation	Perform calculations necessary to develop coordinate charts of part geometry.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a

			minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select, set, and install tooling as indicated by the CNC program and engineering drawing.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Assess programs for accuracy and edit when necessary.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 145 F (Launched)	Basic CNC Swiss Style Lathe Programming and Applications	Perform calculations necessary to develop coordinate charts of part geometry.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Write a basic part program for a CNC Swiss Style Lathe.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Write programs for a CNC Swiss Style Lathe that demonstrate the correct use of tool length compensation, cutter diameter compensation, tool nose radius compensation, and geometry offsets.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Analyze CNC programs written by others to determine machining sequence.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 150 F (Launched)	CNC Programming Using Mastercam	Organize and construct basic geometry of machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of

			total course points earned as a result of written examinations and practicums.
		Select tools for machining operations and organize tool-paths to meet specifications for machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare basic numerical control programs for both CNC milling and turning machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 152 F (Launched)	Advanced CNC Programming Using Mastercam	Organize and construct basic geometry of 3D model parts for machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select tools for the removal of material and toolpaths for rough and finish machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare numerical control programs for CNC machine tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 154 F (Launched)	CNC Programming Using Surfcam	Organize and construct basic geometry of machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select tools for machining operations and organize tool-paths to meet specifications for machined parts.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.

		Prepare basic numerical control programs for both CNC milling and turning machines.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 156 F (Launched)	Advanced CNC Programming Using Surfcam	Organize and construct basic geometry of three dimensional parts for machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Select tools for the removal of material and tool-paths for rough and finish machining operations.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Prepare numerically controlled programs for computer numerical machine tools.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
MACH 180 F (Launched)	Introduction to Metrology	Employ basic measurement tools to perform inspections.	Demonstrate during an exam or lab activity (written or practical) that he or she can use basic measurement tools taught during the class to perform inspections on parts and obtain precise measurements per methods demonstrated during class.
		Describe parts the International System of Units (SI) and identify various national and international organizations from which metrology references; resources; and standards are obtained.	Demonstrate during an exam or lab activity that he or she can correctly identify and identify metrology reference; resources; and standards as applicable.
		Identify and apply correct symbols, abbreviations, and units for all measurements in this course.	Demonstrate during an exam or during a lab activity that he or she can correctly identify and apply correct symbols, abbreviations and units for all measurements in this course.
		Identify and use reference materials to ensure good quality, accurate, traceable measurement results, explain highlights and key concepts of each topic.	Demonstrate during an exam or during a lab activity that he or she can correctly identify and utilize reference materials to ensure good quality; accurate traceable measurement results.
		Perform simple calculations for unit conversions and to obtain final values from Blueprints for inspection reports.	Demonstrate during an exam or lab activity that he or she can perform simple calculations for unit conversions and to obtain final values from blueprints for inspection reports.
MACH 182 F (Launched)	Introduction to CMM Inspection and Romer Arms	Start Up a Coordinate Measurement Machine (CMM) and/or a Romer Arm .	Demonstrate during an exam or lab activity (written or practical) that he or she can start up a CMM and/or Romer Arm

			properly utilizing the correct power up sequence.
		Set-up a CMM and/or Romer Arm utilizing the proper probe and geometric definitions to inspect parts per a given drawing.	Demonstrate during an exam or lab activity that he or she can correctly set-up a CMM and/or Romer Arm to inspect a part per a given drawing.
		Operate a CMM and/or Romer Arm utilizing the software to inspect parts per a given drawing.	Demonstrate during an exam or lab activity that he or she can correctly operate a CMM and/or Romer Arm to inspect a part per a given drawing.
MACH 184 F (Launched)	Advanced CMM and Romer Arm Inspection	Perform model based definition inspection such as creating and importing models.	Demonstrate during an exam or lab activity (written or practical) that he or she can create and import models from other CAD system.
		Perform advanced alignment; use Auto features; understand advanced dimensioning methods; utilize fixturing/workholding for CMMs/Romer Arms; and perform CMM/Romer Arm programming.	Demonstrate during an exam or lab activity (written or practical) that he or she can perform advanced alignment; understands advanced dimensioning methods; can utilize fixturing/workholding devices for CMMs/Romer Arms; and do simple CMM/Romer Arm programming using PC DMIS software or equivalent.
MACH 185 F (Launched)	CMM and Romer Arm Applications	Perform basic inspections on piece parts utilizing inspection software to analyze dimensions and features.	Demonstrate during an exam or lab activity (written or practical) that he or she can inspect a piece part utilizing inspection software.
		Perform inspection and calibration functions on a piece part using a Quick Start Menu from an inspection software.	Demonstrate during an exam or lab activity (written or practical) that he or she can use a Quick Start Menu to calibrate and inspect a piece part using an inspection software.
MATH 024 F (Launched)	Pre-Statistics	Use technology to analyze data by producing appropriate descriptive statistics and plots.	Common questions or problems embedded in exams
		Create relevant algebraic models in two variables and use them to make predictions.	Common questions or problems embedded in exams
		Interpret the meanings of relevant summary statistics and plots in authentic contexts.	Common questions or problems embedded in exams
MATH 026 F (Launched)	Support for Introductory Statistics	Formulate questions that can be addressed with data.	Exam questions.
		Use technology to organize, display, and analyze data.	Exam questions.
		Construct, apply, and interpret mathematical models (specifically linear functions) to represent and communicate relationships in quantitative data.	Exam questions.
MATH 031 F (Launched)	Support for College Algebra	Reorganize or simplify various algebraic expressions.	Exam questions
		Solve polynomial, rational, radical, exponential, or logarithmic equations and inequalities.	Exam questions
		Construct the graph of polynomial, rational, radical, exponential, or logarithmic functions and identify their key features (including domain and range, intercepts, asymptotes, symmetry).	Exam questions
MATH 120 F (Launched)	Introductory Probability and Statistics	Collect, organize, summarize, and analyze data for presentation by conducting statistical studies.	Exam questions
		Generalize from samples to populations,	Exam questions

		perform estimations and hypothesis tests, determine relationships among variables and make predictions based upon those results.	
MATH 120HF (Launched)	Honors Introductory Probability and Statistics	Collect, organize, summarize, and analyze data for presentation by conducting statistical studies.	Exam questions
		Generalize from samples to populations, perform estimations and hypothesis tests, determine relationships among variables and make predictions based upon those results.	Exam questions
MATH 203 F (Launched)	Mathematics for Future Elementary Teachers	Describe alternative algorithms for the basic arithmetic operations in addition to the standard algorithms.	Common questions or problems.
		Differentiate between an "exercise" (work requiring the application of a routine procedure) and a "problem" (work requiring some original step to solve), and identify various problem-solving techniques.	Common questions or problems.
		Respond to sample work from elementary students, identifying where students have misunderstood or confused math concepts.	Common questions or problems.
METL 192 F (Launched)	Fundamentals of Metallurgy	Predict the changes in the mechanical behavior of materials due to thermo-mechanical processing.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Interpret and determine standard mechanical properties from plots of stress versus strain.	Using a course rubric faculty will access outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.
		Conduct meaningful hardness, tensile, impact test and report the test results in a clear and useful manner.	Student report
		Student will determine appropriate tests to be employed to determine given mechanical properties using both destructive and non-destructive techniques.	Student report
MKT 153 F (Launched)	Customer Service on the Internet	Use a working vocabulary of online customer service terms.	Common questions or problems
		Create an internet customer service plan.	Project assessed against a department standard
		Evaluate the various new media tools available for customer service applications.	Common questions or problems
MKT 205 F (Launched)	Understanding Multicultural Markets in the U.S.	Use a working vocabulary of multicultural marketing-related terminology.	Common questions or problems
		Analyze the strategies and tactics of multicultural marketing campaigns.	Common questions or problems
		Compare and contrast possible solutions	Essay/writing assignment assessed against

		to multicultural marketing problems and propose plans of action.	a department standard
MUS 110 F (Launched)	Electronic Music I: Beginning Music Production	Describe and explain analog electronic music synthesis, using appropriate vocabulary and electronic music theory.	Common questions or problems that may include multiple choice quizzes and demonstrations.
		Compose or recompose original music using a basic performance synthesizer and analog software synths.	Skills demonstration or performance assessed against a department standard
		Outline and explain the fundamentals of sound design.	Essay/writing assignment assessed against a department standard
		Create a patch on a virtual and a real analog Synthesizer.	Skills demonstration assessed against a department standard.
		Compose or reconstruct a piece of music in the style of music concrete, ambient and minimal music.	Evaluation of Portfolio music assessed against a department standard.
		Explain the operational principles of the MIDI studio and how it interacts with modern computer based audio equipment.	Essay/writing assignment assessed against a department standard.
MUS 122 F (Launched)	Advanced Music Business	Analyze and discuss all aspects of an artist management contract.	Skills will be assessed through the design of an artist management contract.
		Create varied types of marketing and promotion plans for students finishing an album in Advanced Recording Techniques or MUS 291 and MUS 292.	Students will design and implement a real-world marketing plan involving the marketing and promotion of an album produced on campus by the Recording and Music Production classes or the MUSA 238 class.
		Apply the correct usage of technical vocabulary create contractual agreements as used in the current digital music industry.	The student will submit a written project discussing the topics learned in class.
MUSA 200 F (Launched)	Applied Music-Individual Private Study	Demonstrate improvements in the areas of tone, rhythm, emotional content, and pitch of the compositions they are studying in private lessons.	Skills demonstration or performance assessed against a department standard
NUTR 210HF (Launched)	Honors Human Nutrition	Apply the current Dietary Guidelines for Americans and other nutrition recommendations to diet planning.	Diet planning projects which includes two to four page written conclusions.
		Collect and analyze nutrition research using the scientific method.	Completion of seven to ten page research paper using refereed articles.
		Relate scientific concepts of nutrition to health, fitness, and chronic disease.	Five to ten page paper and presentation describing the risks of chronic disease and nutrition changes to reduce risk.
PE 111 F (Launched)	Off-Season Training - Track and Field	Demonstrate cardiovascular efficiency and specific skills associated with multi-event in Track and Field.	The final assessment will consist of the completion of testing measurements: Use chart SRN Squats, Bench, Chin Ups, Vertical Jump, Standing Long Jump, 400M time trial. Max – 3 attempts.
		Explain the rules pertaining to Track and Field Events.	Each student will be able to outline proper starting and fouls procedures in multiple events. (Vertical jumps, horizontal jumps, sprints, middle distance and throws).
PE 148 F (Launched)	Non-Impact Cardiofit	Perform 20 minutes of non-impact aerobic activity.	Student's ability to perform a 20 minute workout based on department standards. Predicted success 50%.
		Identify major musculature of the body and comprehensive knowledge of the physiological effects on the body as an outcome of this class.	Written Exam. Predicted success 75%
PE 154 F (Launched)	Fitness Testing With Exercise Prescription	Devise an individualized exercise prescription based on evaluation of the components of fitness.	Written exam with a score of 75% on the components of fitness.
		Measure levels of fitness by	Ability to administer field tests and

		administering field tests for the components of fitness.	interpret the outcomes of fitness testing.
PE 173 F (Launched)	Football Fundamentals Offense	Demonstrate fundamental phases of Offensive Football skills. The fundamental skills are stance, footwork, leverage, throwing, catching, running, blocking.	Skill performance tests: 50% success on each of the skills stance, footwork, leverage, throwing, catching, running, blocking.
		Demonstrate knowledge of offensive strategy and knowledge of formations, play calling, zone man pass route concepts, run and pass schemes.	Written exam 20 point multiple choice/essay final: 50% success on knowledge of offensive strategy and knowledge of formations, play calling, zone man pass route concepts, run and pass schemes.
PE 177 F (Launched)	Essentials of Football Offense	Demonstrate advanced phases of Offensive football skills and knowledge. The advanced skills are stance, footwork, leverage, throwing, catching, running, blocking, play recognition, pass schemes, run schemes, blitz protection schemes.	Skill performance tests: 50% success on each of the advanced skills stance, footwork, leverage, throwing, catching, running, blocking, play recognition, pass schemes, run schemes, blitz protection schemes
		Demonstrate knowledge of the rules, terminology, offensive strategy and safety issues involved in football.	Written exam 20 point multiple choice/essay final: 50% success on knowledge of the rules, terminology, offensive strategy and safety issues involved in football.
PE 184 F (Launched)	Dodgeball	Upon successful completion of PE 184 F Dodgeball the student will be able to explain basic rules and demonstrate basic skills while sustaining a level of fitness to be competitive.	Skills Performance Test Satisfaction Survey
PE 189 F (Launched)	Soccer II	Perform advanced soccer techniques. Students will be able to perform advanced techniques of soccer under pressure and in game applicable situations. Skills to include dribbling, passing, receiving, heading, shooting, bending of balls, triangulation, and application of tactics in 1v1 2v2, and 3v3 situations.	Skill performance tests on each of the basic skills: dribbling, passing, receiving, heading, shooting, bending of balls, triangulation, and application of tactics in 1v1 2v2, and 3v3 situations. Grading Scale: 4-Observable Almost Always 90%; 3-Observable Most of the time 75%; 2-Observable Half the time 50%; 1-Observable < Half of the Time.
		Identify the formations and strategies of the game, as well create proper game tactics at a Moderate to Advanced Level.	Written Exam: 70% success on proper match analysis, and provide constructive evaluations and adjustments to game strategies and techniques.
PE 212 F (Launched)	Intercollegiate Swimming	Appraise goals pre-set at the semester beginning.	All student performances are on a timed or scored basis.
		Measure applied techniques which improve swimming race technique or diving point total.	Observation and evaluation.
		Compare and contrast various facilities and community college aquatic programs.	Observation and evaluation.
PE 230 F (Launched)	Yoga Teaching Training Fundamentals	Demonstrate proper techniques in movement and body placement.	Written and practical testing of students' ability to demonstrate three asanas using correct body alignment for their practice level. Success rate expected 75%
		Demonstrate breath work techniques.	Practical observation of the ability to utilize ujjayi breathing while demonstrating three asanas. Expected success rate 75%
PE 231 F (Launched)	Yoga Teaching Training Development	Orally recite Sanskrit asana names while demonstrating the postures.	Oral quiz, while performing asana postures. Expected success rate 75%
		Assist and adjust other students using correct yoga terminology and hands-on techniques.	Demonstration to evaluate the student's use of verbal cues and correct hands-on techniques. Expected success rate 75%

		Design and sequence a 60-minute yoga class.	Written descriptive sequence for a well-balanced 60-minute yoga class. Expected success rate 75%
PE 232 F (Launched)	Yoga Teaching Training Integration	Demonstrate the ability to promote relaxation through guided visualization.	The student will write a script for a five-minute guided visualization. Expected success rate 75%
		Demonstrate the ability to teach yoga on the mat	Teaching demonstration that utilizes effective transitions and models proper body alignment and breathing techniques. Expected success rate 75%
		Demonstrate the ability to cue a student to breath properly while practicing various yoga poses.	Oral quiz while cueing another student on three yoga breathing techniques. Expected success rate 75%
PHOT 100 F (Launched)	Basic Photography	Upon successful completion of PHOT 100, the student will be able to define the Rule of Thirds	exam
PHOT 290 F (Launched)	Internship in Photography I	Compose a career plan based on their internship experience.	Essay
		Compose a photo industry appropriate resume and cover letter.	Project
PHOT 291 F (Launched)	Internship in Photography II	Summarize key elements that the employers require in the performance of the position.	Exam
		Summarize networking techniques.	demonstrate networking technique by producing journal.
PHOT 292 F (Launched)	Internship in Photography III	Design a business card representing qualifications.	Portfolio presentation
		Formulate strategies to negotiate fees.	essay
PHOT 293 F (Launched)	Internship in Photography IV	Describe and diagram a business plan.	Essay
		Differentiate between working as a salaried employee and an independent contractor.	Oral Presentation
PRNT 030 F (Launched)	Introductory Printing Skills Lab	Produce a printed product free of print quality defects using various printing processes, through the safe operation of various printing equipment.	Evaluate student projects for print quality and observe student skills.
		Identify various paper types that are used to print various printed products.	Complete a paper identification test.
PRNT 031 F (Launched)	Offset Skills Lab	Produce a single design using offset lithographic printing process.	Create a single design using offset lithographic printing process to industry standards.
		Produce a multi color design using offset lithographic printing process.	Create a multi color design using offset lithographic printing process to industry standards.
PRNT 032 F (Launched)	Flexographic Printing Skills Lab	Produce a printed product free of print quality defects using the flexographic printing processes.	Student projects will be evaluated for print quality and student skills will be observed.
		Produce a flexographic printing plate to industry standards.	Student plates will be evaluated for print quality and student skills will be observed.
PRNT 033 F (Launched)	Digital Printing Skills Lab	Produce a multi-color design using digital printing process.	Create a multi-color design using digital printing process to industry standards.
		Produce a printed produce that includes some form of bindery and finishing.	Evaluate a multi color print that includes bindery and finishing operations to industry standards.
PRNT 034 F (Launched)	Prepress Skills Lab	Produce a new document incorporating text and images using page layout software.	Create a new document incorporating text and images using page layout software.
		Locate errors via preflight to assess, edit, and correct and electronic file.	Discover and make corrections to a source electronic file using prepress computer software.
PRNT 035 F (Launched)	Screen Printing Skills Lab	Produce single color prints using dark colored plastisol inks on various light	Create a single color print using dark colored plastisol inks on various light

		colored substrates using direct emulsion stencil materials.	colored substrates using direct emulsion stencil materials.
		Create an image and produce that image on a screen frame using the photo-direct system.	Produce an image on a screen frame using the photo-direct system.
PRNT 044 F (Launched)	Self-Publishing Techniques for Sequential Art	Produce a short production run of art booklets using digital print techniques and bindery equipment.	Create a short production run of art booklets in page layout software, print using digital print techniques and finish with saddle stitching and face trimming.
		Produce a high-quality booklet on commonly available printing and bindery equipment.	Demonstrate mastery of imposition and layout skills through the creation a high-quality booklet without the use of specialty equipment. Print master signatures on desktop printers and run copies on an office copier, and bind by hand with a desk stapler.
PRNT 050 F (Launched)	Screen Printing I	Produce single color prints using dark colored plastisol inks on various light colored substrates using direct emulsion stencil materials.	Create a single color print using dark colored plastisol inks on various light colored substrates using direct emulsion stencil materials.
		Create an image and produce that image on a screen frame using the photo-direct system	Produce an image on a screen frame using the photo-direct system.
PRNT 051 F (Launched)	Screen Printing II	Produce single color prints on dark colored substrates using the direct emulsion stencil materials.	Written assignment describing the procedures used and a printed sample of his/her work.
		Produce a two color screen printed sample to industry standards.	Describe in writing the procedures used and a printed sample of his/her work
PRNT 052 F (Launched)	Screen Printing III	Produce multi- color prints on various substrates using techniques used in the industry.	Evaluate finished project in writing and submit final samples.
		Create multi color screens in proper register using the direct emulsion process.	Produce multi color screens in proper register using the direct emulsion process.
PRNT 060 F (Launched)	Basic Digital Printing	Identify various printing defects related to the operation of an digital imaging engine and determine corrective actions.	Produce several digitally printed projects using a digital marking engine. Evaluate print quality and determine and take corrective action necessary to produce a printed piece to industry standards.
		Produce a multi color printed piece using bindery and finishing equipment.	Evaluate multi color printed piece for bindery and finishing processes.
PRNT 061 F (Launched)	Intermediate Digital Imaging	Create a digitally printed piece using advanced imposition and design techniques.	Produce a digitally printed piece using advanced imposition and design techniques.
		Produce a digital multi colored piece with intermediate finishing.	Evaluate the multi colored digital print to determine effective bindery techniques.
PRNT 062 F (Launched)	Advanced Digital Imaging	Design a direct mail advertising piece to US Postal bulk business mail standards.	Create a postcard mailing piece following US Postal standards.
		Produce a variable data print project with consistent image and text formatting for a series of data entries.	Create a variable data print project with consistent image and text formatting for a series of data entries.
PRNT 070 F (Launched)	Quick Print and In-Plant Graphics	Identify various printing defects related to the operation of an offset duplicator and determine corrective actions.	Students will produce several offset printed projects using an offset duplicator. Students will evaluate print quality and determine and take corrective action necessary to produce a printed piece to industry standards.
PRNT 072AF (Launched)	Screen Printing I	Produce single color prints using dark colored plastisol inks on various light colored substrates using direct emulsion stencil materials.	Create a single color print using dark colored plastisol inks on various light colored substrates using direct emulsion stencil materials.
		Create an image and produce that image on a screen frame using the photo-direct	Produce an image on a screen frame using the photo-direct system.

		system.	
PRNT 072BF (Launched)	Screen Printing II	Upon successful completion of PRNT 072BF, Screen Printing II, the student will produce single color prints on dark colored substrates using the direct emulsion stencil materials.	The student will turn in written assignment describing the procedures used and a printed sample of his/her work.
		Upon successful completion of PRNT 072BF, Screen Printing II, the student will produce a two color screen printed sample to industry standards.	The student will turn in written assignment describing the procedures used and a printed sample of his/her work.
PRNT 072CF (Launched)	Screen Printing III	Upon successful completion of PRNT 072CF, Screen Printing III, the student will be able to print multi- colors on various substrates using techniques used in the industry.	The student will turn in an written evaluation of his/her finished project with final samples.
		Upon successful completion of PRNT 072CF, Screen Printing III, the student will be able to produce multi color screens in proper register using the direct emulsion process.	The student will submit multi color prints for evaluation.
PRNT 085 F (Launched)	Introduction to Flexography	Demonstrate proper operational skills required to operate a central impression flexographic printing press to produce single color labels.	Produce a single color label with proper image location and registration, printed without image defects.
		Interpret terms related to the flexographic printing processes as demonstrated by several quizzes and classroom participation.	Demonstrate knowledge of flexographic printing terms through vocabulary assessment quizzes.
PRNT 086 F (Launched)	Advanced Flexography	Demonstrate the proper operational skills required to operate an inline flexographic printing press to produce multi color labels.	Produce a multi color label with proper image location and registration, printed without image defects.
		Produce digital plates, using CTP, (Computer to Plate) software to output a multi color label.	Produce a set of digital plates for a multi color label.
PRNT 133 F (Launched)	Packaging Production	Produce a package through the use of modified standards in CAD software and prototype it on a plotting table.	Create and assemble a package beginning with CAD standards and modifying them to suit an object. Create the prototype with the use of a CAD-driven plotter to cut and crease SBS material.
		Design the graphical component of a package using illustration software to fit a CAD die line, print the design using digital printing techniques, register the die line to the printed piece and cut out a three dimensional prototype.	Create an original design using illustration software to fit a CAD die line, print the design using digital printing techniques, register the die line to the printed piece on a plotting table and cut out a three dimensional prototype.
PRNT 161 F (Launched)	Sheetfed Offset Presswork	Upon successful completion of PRNT 161 F the student will be able to identify print quality defects related to the offset lithographic printing process and determine corrective actions.	Students will produce printed pieces without print quality defects using the offset lithographic printing process.
		Upon successful completion of PRNT 161 F the student will be able to identify various paper types used in the printing industry.	Students will produce a paper samples book with various paper samples taken from the printing laboratory.
PRNT 162 F (Launched)	Intermediate Sheetfed Offset Presswork	Upon completion of Print 162 F the student will be able to construct a multi color job using a sheetfed offset press.	Students will produce a multi color job on a large format offset press, printed to industry standards.
PSY 161 F (Launched)	Elementary Statistics for Behavioral Science	Compute and evaluate descriptive (e.g., mean, median, mode, variance, standard deviation) and inferential (e.g., Pearson correlation, t tests, z test, and one-way analysis of variance) statistics.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
		Construct and interpret simple and	Computational problems; multiple choice

		grouped frequency distributions, histograms, simply polygons, scatter plots, and stem-and-leaf diagrams.	and essay exams; in-class exercises, data collection activities, and term papers.
		Analyze data and interpret output for descriptive statistics, t tests, correlation, and one-way analysis of variance utilizing SPSS software.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
		Identify appropriate statistical tests to be conducted on data for specific types of research studies.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
PSY 161HF (Launched)	Honors Elementary Statistics for Behavioral Science	Construct and interpret simple and grouped frequency distributions, histograms, simply polygons, scatter plots, and stem-and-leaf diagrams.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
		Analyze data and interpret output for descriptive statistics, t tests, correlation, and one-way analysis of variance utilizing SPSS software.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
		Identify appropriate statistical tests to be conducted on data for specific types of research studies.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
		Compute and evaluate descriptive (e.g., mean, median, mode, variance, standard deviation) and inferential (e.g., Pearson correlation, t tests, z test, and one-way analysis of variance) statistics.	Computational problems; multiple choice and essay exams; in-class exercises, data collection activities, and term papers.
READ 142 F (Launched)	College Reading: Logical Analysis and Evaluation	Demonstrate an understanding of college-level vocabulary.	Skills demonstration or performance assessed against a department standard
		Identify and analyze the rhetorical strategies in a college-level argument.	Skills demonstration or performance assessed against a department standard.
		Compose a written rhetorical analysis based upon the author's claim and support.	Skills demonstration or performance assessed against a department standard.
		Evaluate the credibility of the author and the evidence provided in a written argument.	Skills demonstration or performance assessed against a department standard.
SOC 198 F (Launched)	Sociology Internship	Explain and apply sociological theory in assessing social programs.	Instructor and student will analyze and assess the student's internship experience, while considering sociological theoretical interpretation of social structures and institutions.
		Compare and contrast the efficacy of a specific social program, agency or organization with similar social programs.	Instructor and student will analyze and assess the student's internship experience, while considering sociological theoretical interpretation of social structures and institutions.
		Identify potential academic and career paths in social service agencies, organizations and/or programs.	Instructor and student will analyze and assess the student's internship experience, while considering sociological theoretical interpretation of social structures and institutions.
SOSC 120 F (Launched)	Introduction to Probability and Statistics	Demonstrate reasonable knowledge regarding descriptive statistics and will be able to calculate the mean, mode, median, range and standard deviation.	Multiple choice questions and/or calculation problems
		Demonstrate reasonable knowledge regarding probability and will be able to solve problems involving classic probability.	Multiple choice questions and/or calculation problems.
		Demonstrate reasonable knowledge of inferential statistics, including the ability to use z, t and chi square distributions to make statistical	Multiple choice questions and/or calculation problems.

		inferences, as well as the ability to read and interpret computer output of statistical data.	
SOSC 130 F (Launched)	Introduction to LGBTQ Studies	Examine the intersections of sexism, racism, classism and ageism within the context of LGBTQ political struggles in the U.S.	Common multiple-choice or other objective questions embedded in an exam or as a stand-alone assessment; and/or essay or other writing assignment assessed against a department standard; and/or research paper assessed against a department standard.
		Assess theories about sexual orientation and gender identity within the context of Feminist Theory, Gender Theory, and Queer Theory.	Common multiple-choice or other objective questions embedded in an exam or as a stand-alone assessment; and/or essay or other writing assignment assessed against a department standard; and/or research paper assessed against a department standard.
		Examine sexual orientation and gender identity issues within various groups, including Native Americans, African Americans, Chicano/Chicanas and Latino/Latinas, and Asian Americans.	Common multiple-choice or other objective questions embedded in an exam or as a stand-alone assessment; and/or essay or other writing assignment assessed against a department standard; and/or research paper assessed against a department standard.
STSV 215 F (Launched)	Tutoring Techniques		
STSV 223 F (Launched)	Helping Skills in Human Services		
STSV 299 F (Launched)	EOPS: Independent Study	Explain how they will use what they learned from the independent study in their personal/professional life.	.
		Research a specific career in a human services related topic, then state and explain conclusions about it.	.
TECH 080 F (Launched)	Federal Aviation Administration Drone Pilot Test Preparation	Identify parts of a drone aircraft.	Exam
		Explain the different parts of flight.	Exam
TECH 081 F (Launched)	Technical Mathematics I	Solve simple technical mathematical problems by selecting and applying appropriate formulas.	Tests, quizzes, class assignments, and/or projects assessed against a department standard.
		Solve for missing angles and lengths on a right triangle using trigonometric ratios.	Tests, quizzes, class assignments, and/or projects assessed against a department standard.
TECH 088 F (Launched)	Technical Science	Select and apply the knowledge, techniques, skills and modern tools of the discipline to broadly-defined engineering technology activities.	Tests, quizzes, class assignments, and/or projects assessed against a department standard.
		Select and apply a knowledge of mathematics, science, engineering and technology to technical problems that require the application of principles and applied procedures or methodologies.	Tests, quizzes, class assignments, and/or projects assessed against a department standard.
		Conduct standard tests and measurements; analyze and interpret tests/measurements and/or experiments; and apply test/measurement data from experiments to improve a process.	Tests, quizzes, class assignments, and/or projects assessed against a department standard.
TECH 108 F (Launched)	Manufacturing Processes	Identify fabricating techniques and processes used in the metals and plastics industries.	Using a course rubric faculty will assess outcomes by determining student performance at a competency level suggested by the machine technology vocational advisory committee. Committee advises that students meet a minimum standard equivalent to 70% of total course points earned as a result of written examinations and practicums.

		Demonstrate ability to apply correct manufacturing processes to a simple product design.	Portfolio or student report
TECH 127 F (Launched)	Industrial Safety	Identify the terminology and governmental requirements associated with industrial safety.	Tests, quizzes, class assignments, and/or projects.
		Identify the accident causation and appropriate counter measures.	Tests, quizzes, class assignments, and/or projects.
TECH 131 F (Launched)	Basic Electricity and Basic Electronics	Define and apply Ohm's Law to a practical application.	Objective test applied to a department standard
		Define current, resistance, and potential difference, and apply that knowledge to a practical application.	Objective test applied to a department standard.
		Define resistors, capacitors, inductors, solenoids and relays, and apply that knowledge to solve a practical problem.	Objective test applied to a department standard.
TECH 132 F (Launched)	Basics of Electric Motor Controls	Explain the differences between a manual starter and a magnetic starter.	Exam judged against a department standard.
		Demonstrate how to reverse the shaft rotation of a three-phase motor.	Project demonstration judged against a department standard.
		Explain the three basic conditions that can cause fire or explosion.	Exam judged against a department standard.
TECH 135 F (Launched)	Introduction to Programmable Logic Controllers	Define a programmable logic controller and describe the general type of application in which a programmable logic controller would best be used, and give examples.	Exam judged against a department standard.
		Explain the operation of common input and output devices and identify their symbols.	Exam judged against a department standard.
		Describe an electro-magnetic relay and define the terms control circuit, power circuit, NO, and NC.	Exam judged against a department standard.
TECH 136 F (Launched)	Computer Integrated Manufacturing and Advanced PLC	Explain the hardware requirements and identify the elements of a simple programmable logic controller system.	Exam judged against a department standard.
		Identify and explain routine maintenance procedures required by a programmable controller system.	Exam judged against a department standard
		Identify and explain the contents of a data packet used in Local Area Network Transmission.	Exam judged against a department standard.
		Compare and contrast the advantages and disadvantages of the three common transmission media used with Local Area Networks.	Exam judged against a department standard.
TECH 137 F (Launched)	Electronic Instrumentation and Networking	Explain the four essential functions of an automatic control system.	Exam judged against a department standard.
		Explain the basic principles governing electrical signal transmission, including Ohm's law, and identify standard current and voltage signals.	Exam judged against a department standard.
		Compare and contrast analog and digital devices and explain how each is applied to measurement.	Exam judged against a department standard.
TECH 199 F (Launched)	Technology and Engineering Independent Study I	Demonstrate enhanced specific skills on topics and/or projects explored in the course of the independent student.	Instructor will require written or verbal research proposal or other project specifications.
		Outline how the independent study furthered or deepened the student's knowledge on the topic or project studied.	Instructor will require a final research paper or project which illustrates the student's course of study and knowledge gained in this class.

		Give examples of the any applications or conclusions that the independent study yielded.	Instructor and student will discuss and evaluate the final project as a reflection of the effectiveness and quality of the independent study.
TECH 299 F (Launched)	Technology and Engineering Independent Study II	Identify the specific topics and/or projects explored in the course of the independent student.	Instructor will require written or verbal research proposal or other project specifications.
		Explain how the independent study furthered or deepened the student's course of study.	Instructor will require a final research paper or project which illustrates the student's course of study and knowledge gained in this class.
		Evaluate the effectiveness and quality of the independent study.	Instructor and student will discuss and evaluate the final project as a reflection of the effectiveness and quality of the independent study.
THEA 139 F (Launched)	Beginning Musical Theatre Concert Production	Evaluate the execution of an actors assigned role or position.	Written post-mortem evaluation and attendance and participation in post-mortem discussion.
		Value, as a performer, professional rehearsal and performance skills.	Written post-mortem evaluation and attendance and participation in post-mortem discussion.
		Value, as a technician, professional rehearsal and performance skills.	Written post-mortem evaluation and attendance and participation in post-mortem discussion.
THEA 180 F (Launched)	Beginning Principles of Acting	Demonstrate the appropriate use of stage terminology and professional work ethics.	End of semester jury performance of final scene before the acting faculty.
		Demonstrate the ability to execute character based motivations, mannerisms, vocal and physical choices as directed.	End of semester jury performance of final scene before the acting faculty.
		Employ analytical skills through written script analysis, written and verbal evaluation of peer performances and of live theatrical productions.	Active participation in classroom discussions.
THEA 188 F (Launched)	Introduction to Movement and Performance Techniques for Musical Theatre	Identify and differentiate the basic techniques of choreography for musical theater from 1865 to 1964	Quiz.
		Review and select various musical theatre dance styles from 1865 to 1964.	Writing project.
THEA 189 F (Launched)	Beginning Movement and Performance Techniques for Musical Theatre	Describe basic dance steps and combinations that comprise choreography for contemporary musical theatre from 1964 to present day.	Quiz
		Demonstrate choreography by performing as an ensemble member in a contemporary musical theatre movement performance ranging from 1964 to present day.	Performance based project
		Review and recall physical, emotional and perceptual skills for contemporary musical theatre from 1964 to present day.	Quiz
THEA 198 F (Launched)	Introduction to Stage Combat	Synthesize individual unarmed and armed techniques into short phrases of dramatically gripping choreography within the context of a scene(s) from dramatic literature.	End of the semester jury performance and adjudication before the acting faculty
		Analyze, evaluate, and critique the dramatic effectiveness and safety measures required of staged violence.	Written and oral evaluation and feedback of peer work, department productions, and professional demonstrations through journal entries and in class discussion.
THEA 199 F (Launched)	Beginning Principles of Stage	Synthesize individual armed techniques	End of the semester jury performance and

	Combat	into short phrases of dramatically gripping choreography within the context of a scene(s) from dramatic literature.	adjudication before the acting faculty.
		Analyze, evaluate, and critique the dramatic effectiveness and safety measures required of staged violence.	Written and oral evaluation and feedback of peer work, department productions, and professional demonstrations through journal entries and in class discussion.
THEA 239 F (Launched)	Intermediate Musical Theatre Concert Production	Evaluate the execution of student assigned roles or positions.	Written post-mortem evaluation and attendance and participation in post-mortem discussion.
		Apply, as a performer, professional rehearsal and performance skills.	Written post-mortem evaluation and attendance and participation in post-mortem discussion.
		Apply, as a technician, professional rehearsal and performance skills.	Written post-mortem evaluation and attendance and participation in post-mortem discussion.
THEA 278 F (Launched)	Intermediate Musical Theatre Production	Evaluate, at an intermediate level, the execution of a performance or technical role in regards to a theatrical musical production.	Written post mortem review, and discussion lead by instructor.
		Evaluate, at an intermediate level, the execution of their performance or technical role through following the rules, regulations, and professional behaviors contained in production's handbooks.	Written post mortem review, and discussion lead by instructor.
THEA 284 F (Launched)	Intermediate Musical Theatre I	Demonstrate a clear understanding of basic staging and blocking fundamentals.	Skills assessment based upon a department standard.
		Demonstrate professional demeanor as it pertains to audition attire.	Skills assessment based upon a department standard.
		Demonstrate consistent vocal pitch and meter.	Skills assessment based upon a department standard.
		Demonstrate clear character motivation.	Skills assessment based upon a department standard.
WELD 091AF (Launched)	Industrial Welding Fundamentals	Demonstrate basic competencies for the proper operation of oxyacetylene welding, oxyacetylene cutting and torch brazing equipment.	Lab sign-off sheet
		Determine proper gas flow pressures for safe operation of oxyacetylene welding equipment.	Set up of oxyacetylene welding booth
WELD 091BF (Launched)	Semi-Automatic Welding Applications	Demonstrate competencies for the proper operation of gas metal arc welding and flux core arc welding equipment in all positions on carbon steel that meet the requirements of industrial standards.	Lab sign-off sheet
		Demonstrate proper parameters (voltage, wire feed speed and gas flow rates) of gas metal arc welding or flux core arc welding equipment.	Set up gas metal arc welding or flux core arc welding equipment
WELD 091CF (Launched)	Manual Arc Welding Fundamentals	Demonstrate competencies for the proper operation of shielded metal arc welding and gas tungsten arc welding equipment in all positions on carbon steel that meet the requirements of industrial standards.	Lab sign-off sheet
		Demonstrate proper set-up and operating parameters of shielded metal arc welding or gas tungsten arc welding equipment	Set up shielded metal arc welding or gas tungsten arc welding equipment

WELD 091DF (Launched)	Structural Welding Certification	Demonstrate proper set-up and operating parameter of GMAW, GTAW, SMAW or FCAW welding equipment	Lab sign-off sheet
		Prepare welding skills samples that meet the requirements of visual acceptance criteria and destructive testing methods of local and national welding fabrication codes.	Lab sign-off sheet
WELD 096 F (Launched)	Welding Inspection Technology	Prepare inspection reports on weldments to meet the standards of local and national welding fabrication codes.	Tests, quizzes, class assignments, and/or projects.
		Interpret engineering drawings related to the welding fabrication industry.	Tests, quizzes, class assignments, and/or projects.
		Select measuring tools to evaluate welding assemblies.	Tests, quizzes, class assignments, and/or projects.
WELL 110 F (Launched)	Pathology: The Massage Connection	Describe pathology and explain how it relates to massage therapy.	Student will be 70% successful on written test
		Describe the difference between a local and a systemic contradiction for massage.	Student will be 70% successful on written test.
WELL 112 F (Launched)	Body from the Inside Out	Identify and define the levels of complexity for body organization and provide an example of each.	Written test with 70% success rate.
		Identify origin, insertion and actions of major muscles as related to the skeletal system.	Written test with 70% success.
		Compare and contrast the benefits verses physiologic effects of manual therapy.	Written test 70% success.
WELL 265 F (Launched)	Movement Anatomy	Develop an understanding of kinesiology and functional human movement.	Written exam with at least a 70% success rate.
		Demonstrate proper efficient movement.	Written exam with at least a 70% success rate and demonstration of proper movement of joints for specific exercises.
		Analyze postural stabilization techniques.	Written exam with at least a 70% success rate.
WMNS 100HF (Launched)	Honors Introduction to Women's Studies	Identify and articulate feminist theory in literature and argumentation.	Short essay and multiple choice exams.
		Compare and contrast feminist theory to interpret issues and topics in the Humanities, Social and Behavioral Sciences, Science, Medicine and Law.	Short essay and multiple choice exams.
		Consider various perspectives relative to the role of women in diverse social and cultural settings.	Short essay and multiple choice exams.
WOOD 110 F (Launched)	Fundamentals of Woodwork	Upon successful completion WOOD 110 F Fundamentals of Woodwork, the student will be able to demonstrate skills in the safe operation of basic hand and machine tools.	The successful student will complete written exams, personal and/or class projects and laboratory exercises with a cumulative grade of "C" or better or pass.
		Upon successful completion WOOD 110 F Fundamentals of Woodwork, the student will be able to produce a project using basic furniture/cabinet construction techniques.	The successful student will complete written exams, personal and/or class projects and laboratory exercises with a cumulative grade of "C" or better or pass.
		Upon successful completion WOOD 110 F Fundamentals of Woodwork, the student will be able to identify basic furniture/cabinet construction methods in order to proceed into more advanced furniture/cabinetmaking classes.	The successful student will complete written exams, personal and/or class projects and laboratory exercises with a cumulative grade of "C" or better or pass.

