ART 110 - History of Art: Paleolithic to Renaissance

Approval Date: 04/02/2009  Effective Term: Fall 2009

Department: ART
Division: Fine and Performing Arts
Units: 3.00
Grading Option: Letter Grade
Transferability: UC/CSU Transferable
Course is: AA/AS Degree
Repeatability: 
Contact Hours per Term:
  Lecture/Discussion: 3.00
Associate Degree GE Applicability: No
Recommended Class Size: 35

Discipline/Minimum Qualifications:
Art

Catalog Description:
The first in a series of two survey classes in art history. In this course the student will be able to study major works of art through reproductions made available in pictures and slides. The emphasis is placed on major monuments of art in painting, sculpture, and architectures of the Western World from prehistoric times until the Renaissance.

Schedule Description:
The first in a series of two survey classes in art history. In this course the student will be able to study major works of art through reproductions made available in pictures and slides. The emphasis is placed on major monuments of art in painting, sculpture, and architectures of the Western World from prehistoric times until the Renaissance.

Student Learning Outcome:
  1. Compare and contrast significant contributions made by ancient though medieval cultures to the progression of Western art

Course Objectives:
  1. Analyze the complexity and contribution to world art of early prehistoric cultures.
  2. Evaluate the influence of Egyptian art on the art of Western Europe.
  3. Critique the evolution of figure development in Greek art.
  4. Categorize the influence of Greek art on Roman art.
  5. Analyze the relationship between Etruscan and Roman art.
  6. Delineate the changes from late Roman art to the art of the Early Christian period.
  7. Compare and contrast Early Christian and Byzantine art
  8. Explain the role of Classical art in the development of subsequent periods of world art.
  9. Critique the position of Romanesque Architecture in the history of world architecture.

Course Content Outline:
A. The Birth of Art
  1. Paleolithic Art
  2. Neolithic Art
  3. Art of the Ancient Near East Art
B. Egyptian Art
1. Predynastic and Old Kingdom
2. Middle Kingdom
3. New Kingdom & Late Period
C. Aegean Art
1. Prehistoric and Cycladic Art
2. Minoan Art
3. Mycenaean
D. Greek Art
1. Orientalizing Period
2. Archaic Period
3. Classical Period
4. Hellenistic Period
E. Roman Art
1. Etruscan Art
2. The Republic
3. Early Empire
4. High Empire
5. Late Empire
F. Early Christian Art
1. Late Antiquity
2. Catacombs and Funerary Art
3. Early Christian Architecture
G. Byzantine Art
1. Early Byzantine Art
2. Middle Byzantine Art
3. Late Byzantine Art
H. Romanesque Art
1. Romanesque Architecture
2. Romanesque Sculpture
3. Romanesque Painting
I. Gothic Art
1. Gothic Architecture
2. Gothic Sculpture
3. Gothic Painting

Methods of Instruction:
Lecture:

Methods of Evaluation:
Exams/Tests/Quizzes
Writing Assignments

Typical Assignments:
Reading:
Text Primary sources DVD Reading assignment Online research and reading assignment:
Compare The French Gothic style of Chartre Cathedral in your textbook with a Gothic cathedral from another country.

Writing, Problem Solving or Performance:
Museum Field Trip Writing Analysis Research project

Other:
Studio Project

Required Materials
Examples:
<table>
<thead>
<tr>
<th><strong>Book 1</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author:</strong> Fred S. Kleiner</td>
<td><strong>Publication Date:</strong> 2005</td>
</tr>
<tr>
<td><strong>Title:</strong> Gardner’s Art Through the Ages</td>
<td><strong>Publisher:</strong> Thomson-Wadsworth</td>
</tr>
<tr>
<td><strong>Edition:</strong> 12th</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Book 2</strong></th>
<th></th>
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<tbody>
<tr>
<td><strong>Author:</strong> Sylvan Barnet</td>
<td><strong>Publication Date:</strong> 1997</td>
</tr>
<tr>
<td><strong>Title:</strong> A Short Guide to Writing About Art</td>
<td><strong>Publisher:</strong> Longman</td>
</tr>
<tr>
<td><strong>Edition:</strong> 5th</td>
<td></td>
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</table>

**Course Preparation:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prerequisite(s):</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Co-Requisite(s):</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Recommended:</strong></td>
<td>None</td>
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BIOSCI 107 - Molecular & Cellular Biology

Approval Date: 10/15/2009  Effective Term: Fall 2010

Department: BIOLOGICAL SCIENCES
Division: Mathematics, Sciences & Engineering
Units: 4.00
Grading Option: Letter Grade
Transferability: UC/CSU Transferable
Course is: AA/AS Degree
Repeatability: Not Repeatable

Contact Hours per Term:
Lecture/Discussion: 54.00
Lab: 54.00

Associate Degree GE Applicability:
Recommended Class Size: 35

Discipline/Minimum Qualifications:
Biological Sciences

Catalog Description:
Introduces the principles of cellular form and function including: bioenergetics and metabolism, molecular structure and evolution, gene regulation, cellular anatomy and physiology, and the principles of biotechnology.

Schedule Description:
Introduces the principles of cellular form and function including: bioenergetics and metabolism, molecular structure and evolution, gene regulation, cellular anatomy and physiology, and the principles of biotechnology.

Student Learning Outcome:
1. (Lecture) Compare and contrast eukaryotic and prokaryotic cell morphology, bioenergetics, gene regulation, and cellular physiology.
2. (Lecture) Differentiate the structures of representative biological molecules and relate their structures to cellular functions and physiology.
3. (Lab) Collect, review, and analyze biological data according to scientific inquiry.
4. (Lab) Devise and test hypotheses through experimentally applying the principles of microscopy, biochemistry, molecular biology, biotechnology, physiology, and cell biology.

Course Objectives:
Lecture

1. Describe the two unifying ideas in science: the cell theory and the theory of evolution by natural selection.
2. Contrast the different chemical bonds that can form between atoms to form biological molecules.
3. Differentiate the structure and function of the four macromolecules important for life: carbohydrates, lipids, proteins, and nucleic acids.
4. Compare the cellular morphology and physiology of prokaryotic cells and eukaryotic cells.
5. Differentiate between transport mechanisms that move water and solutes across cell membranes.
6. Apply the first and second Laws of Thermodynamics to the flow of energy in living systems.
7. Diagram endothermic and exothermic reactions, and the effect that enzymes have on these reactions.
8. Explain how oxidation of organic molecules (like glucose) generates ATP during cellular respiration.
9. Describe how the light dependent and light independent reactions of photosynthesis harvest and transform energy from light into organic molecules.
10. Diagram the different stages of the cell cycle and distinguish between the outcomes of mitotic and meiotic cell divisions.
11. Distinguish between recessive, dominant, and sex-linked traits, and their corresponding patterns of inheritance.
12. Differentiate between genetic and environmental effects on phenotype.
13. Diagram the steps involved in DNA replication including the enzymes at each step.
14. Demonstrate the link between transcription and translation of The Central Dogma and gene expression.
15. Contrast the regulation of transcription and translation in prokaryotic and eukaryotic cells.
16. Explain the correlation between differential gene regulation and cell specialization.
17. Explain the importance of cell signaling in coordinating tissue functions and cellular responses to environmental cues.
18. Evaluate the importance of recombinant DNA technologies in agriculture, forensics, and medicine.
19. Compare the mechanisms and cells involved in specific and nonspecific immune responses.

Laboratory

1. Analyze the steps involved in hypothesis testing and experimental design.
2. Produce and interpret graphical representations of experimental data, calculate experimental error, and correlate error with statistical significance of results.
3. Determine the identity of unknown samples using scientific inquiry and standard curve analysis.
4. Analyze the molecular components of living organisms using microscopy, biochemical tests, differential centrifugation, chromatography, spectrophotometry, and gel electrophoresis.
5. Analyze the molecular components of living organisms using microscopy, biochemical tests, differential centrifugation, chromatography, spectrophotometry, and gel electrophoresis.
6. Measure metabolic reactions in living systems and analyze the effect of changing environmental conditions on reaction rate.
7. Examine cellular differentiation (specialization) during embryogenesis and investigate the structure-function relationship of specialized cells in the tissues and organs of mammalian systems (fetal pig).
8. Examine the importance of recombinant DNA technologies including: restriction enzyme digestion, bacterial transformation, gel electrophoresis, and column chromatography, in modern therapeutic design, genetic screening, and/or forensic analysis.
9. Evaluate the ethical considerations that may arise with the use of genetic engineering in plants and animals, and/or treatment of genetic disorders in humans.

Course Content Outline:

MOLECULAR AND CELLULAR BIOLOGY

LECTURE:

1. An Evolutionary Framework for Biology
   A. What is Life?
   B. Chemical and Biological Evolution
   C. Levels of Organization of Life
2. The Cell
   A. Life and Chemistry: Small Molecules
      A. Water and the origin of life's Chemistry
      B. Atoms: The constituents of matter
      C. Chemical Bonds: Linking atoms together
      D. Chemical reactions: Atoms change partners
      E. Water: Structure and Properties
F. Acids, Bases, and the pH scale

B. Life and Chemistry: Large Molecules
   A. Theories of the origin of life
   B. Macromolecules: Giant polymers
   C. Condensation and hydrolysis reactions
   D. Proteins: Polymers of amino acids
   E. Carbohydrates: Sugars and sugar polymers
   F. Lipids: Water-insoluble molecules
   G. Nuclei Acids: Informational macromolecules that can be catalytic

C. Cells: The Basic Units of Life
   A. Prokaryotic cells
   B. Eukaryotic cells
   C. Organelles that process information
   D. The endomembrane system
   E. Organelles that process energy
   F. Other organelles
   G. The cytoskeleton
   H. Extracellular structures

D. Cellular Membranes
   A. Membrane composition and structure
   B. Cell recognition and adhesion
   C. Passive processes of membrane transport
   D. Active transport
   E. Endocytosis and exocytosis
   F. Membranes are not simply barriers
   G. Membranes are dynamic

E. Energy, Enzymes, and Metabolism
   A. Energy and energy conversions
   B. ATP: Transferring energy in cells
   C. Enzymes: Biological catalysts
   D. Molecular structure determines enzyme function
   E. Metabolism and the regulation of enzymes

F. Cellular Pathways that Harvest Chemical Energy
   A. Energy and electrons from glucose
   B. Glycolysis: From glucose to pyruvate
   C. Pyruvate oxidation
   D. The respiratory chain: Electrons, protons, and ATP production
   E. Fermentation: ATP from glucose without oxygen
   F. Contrasting energy yields
   G. Relationships between metabolic pathways
   H. Regulating energy pathways

G. Photosynthesis: Energy from the Sun
   A. Identifying photosynthetic reactants and products
   B. The two pathways of photosynthesis: An overview
   C. The interaction of light and pigments
   D. The light reactions: Electron transport, reductions, and photophosphorilation
   E. Making carbohydrate from carbon dioxide: The Calvin-Benson cycle
   F. Photorespiration and its consequences
   G. Metabolic pathways in plants

3. Information and Heredity
   A. Chromosomes, the Cell Cycle, and Cell Division
      A. Systems of cell reproduction
      B. Interphase and the control of cell division
      C. Eukaryotic chromosomes
      D. Mitosis: Distributing exact copies of genetic information
      E. Cytokinesis: The division of the cytoplasm
      F. Reproduction: Asexual and sexual
      G. Meiosis: A pair of nuclear divisions
      H. Meiotic errors
      I. Cell death
   B. Genetics: Mendel and Beyond
      A. The foundations of genetics
B. Mendel’s experiments and the laws of inheritance
C. Alleles and their interactions
D. Gene interactions
E. Genes and chromosomes
F. Sex determination and sex-linked inheritance
G. Non-nuclear inheritance

C. DNA and its Role in Heredity
   A. DNA: The genetic material
   B. The structure of DNA
   C. Determining the DNA replication mechanism
   D. The molecular mechanisms of DNA replication
   E. DNA proofreading and repair
   F. Practical applications of DNA replication

D. From DNA to protein: Genotype and Phenotype
   A. One gene, one polypeptide
   B. DNA, RNA, and the flow of information
   C. Transcription: DNA-directed RNA synthesis
   D. The genetic code
   E. Preparation for translation: Linking RNAs, amino acids, and ribosomes
   F. Translation: RNA-directed polypeptide synthesis
   G. Regulation of translation
   H. Posttranslational events
   I. Mutations: Heritable changes in genes

E. The Genetics of Viruses and Prokaryotes
   A. Probing the nature of genes
   B. Viruses: Reproduction and recombination
   C. Prokaryotes: Reproduction and recombination
   D. Regulation of gene expression in prokaryotes
   E. Control of transcription in viruses
   F. Prokaryotic genomes

F. The Eukaryotic Genome and its Expression
   A. The eukaryotic genome
   B. Repetitive sequences in the eukaryotic genome
   C. The structures of protein-coding genes
   D. RNA processing
   E. Transcriptional regulation of gene expression
   F. Posttranscriptional regulation
   G. Translational and posttranslational regulation

G. Cell Signaling and Communication
   A. Signals
   B. Receptors
   C. Signal transduction
   D. Signal effects: Changes in cell function
   E. Direct intercellular communication

H. Recombinant DNA and Biotechnology
   A. Cleaving and rejoining DNA
   B. Getting new genes into cells
   C. Sources of genes for cloning
   D. Some additional tools for DNA manipulation
   E. Biotechnology: Applications of DNA manipulation

I. Molecular Biology and Medicine
   A. Abnormal or missing proteins: The mutant phenotype
   B. Mutations and human diseases
   C. Detecting genetic variations: Screening for human diseases
   D. Cancer: A disease of genetic changes
   E. Treating genetic diseases
   F. Sequencing the human genome

J. Natural Defenses Against Disease
   A. Animal defense systems
   B. Nonspecific defenses
   C. Specific defenses: The immune system
   D. B-cells: The humoral immune response
   E. T-cells: The cellular immune response
F. The genetic basis of antibody diversity
G. Disorders of the immune system
4. Development: Differential Gene Expression in Development
   A. The process of development
   B. The role of differential gene expression in cell differentiation
   C. The roles of cytoplasmic segregation and induction in cell determination
   D. The role of pattern formation in organ development
   E. The role of differential gene expression in establishing body segmentation

LAB:

1. Metric measurements and conversions
2. Microscopic analysis of prepared and wet mount slides
3. Identification of biological macromolecules in food using biochemical essays
   A. Biuret, Benedict's, Sudan, Char, and Iodine reactions
4. Spectrophotometric analysis of protein samples and standard curve preparation
5. Evaluation of conditions which modify enzymatic reactions
   A. variable concentrations, temperature and pH
6. Pigment separation by paper chromatography
7. Measure relationship between light intensity and photosynthetic rate
8. Differential centrifugation to separate subcellular components by size
9. Measure osmosis and diffusion across dialysis tubing
   A. diffusion gradients and movement across a semipermeable membrane
10. Extract and stain polytene chromosomes to view chromatin banding
11. Extract and purify onion DNA for electrophoresis analysis
12. Digest DNA with restriction enzymes and observe banding patterns by gel electrophoresis
13. Transform bacteria with plasmid DNA
14. Purify recombinant protein using hydrophobic interaction column (HIC)
15. Compare embryologic development in sea urchins, frogs, chickens, and humans
16. Analyze cell structure and tissue architecture of histological slides
17. Observe anatomical structures and organ systems of a fetal pig
18. Discuss biomedical ethics relevant to biotechnology techniques

Methods of Instruction:
Lab, Lecture, Distance Education:

Methods of Evaluation:
Exams/Tests/Quizzes
Skill Demonstrations
Quizzes Written Assignments

Typical Assignments:
Reading:
Textbook chapters Laboratory manual - required exercises Selected journals Recommended related paperbacks

Writing, Problem Solving or Performance:
Research paper Reaction papers/summaries - case studies Math calculations Lab exercises Role presentations

Other:
Active learning cooperatives and group presentations Oral presentations - individual topics
Panel discussions

Required Materials
Examples:

Book 1
Author: Purves, W. H., Sadava, D., Orians, G. H., Heller, H. C.
Title: Life: The Science of Biology
Edition: 8th
Publisher: W. H. Freeman
Publication Date: 2006

Book 2
Author: Golbert, Miriam and Cude, Kelly
Title: Molecular and Cellular Biology Laboratory Manual
Publisher: College of the Canyons, Reprographics
Publication Date: 2009
Edition: 10th

Course Preparation:
Prerequisite(s): MATH 070
Co-Requisite(s): None
Recommended: None

Distance Learning Addendum
A. Delivery Methods
Online/Hybrid

If Other Methods selected, describe here

B. How will the methods of instruction used in the face-to-face mode of this course be adapted for the distance learning mode?
Describe and give examples of online methods of instruction, which might include course management system discussion boards; instructor developed web lectures; converted Power Point presentations; digital video clips; graphics (digital charts, diagrams, photos, images, annotated screen shots); digital animations; web guests; online reference resources; chat; e-mail; publisher prepared online materials; course cartridge materials; CD/DVD support materials; instructor web site; online library requests; textbook supplements.

The lecture portion of this course will be taught on-line by utilizing a course management system. This system may be comprised of: instructor developed Power point Presentations, publisher prepared content, animations, short-movies or simulations. Instructor's personal web site may also be used to augment the information delivered with addition of related links. The laboratory component will be taught face-to-face following the regular laboratory courses taught on campus. Example of lecture assignments on-line: Students will be directed to a specific web site where new discoveries in molecular genetics and/or diseases with molecular based cases are depicted, such as the Human Genome Project web site. For example, they may analyze electrophoresis DNA runs of different species to correlate the information learned in lectures and Power Point Presentations.

C. Title 5 (55376) states that all approved courses offered as distance education shall include regular effective contact between instructor and students, through group and individual meetings, orientation and review sessions, supplemental seminar or study lesions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities. Describe how you will maintain regular effective contact with the students, including what will make this interaction effective.

An orientation letter will be posted on the Distance Learning Website prior to the start date of the class. Instructors may hold an orientation session or face-to-face on the first day of instruction. Instructors will communicate with students at least once a week via announcements, emails, chats, office hours, discussion boards, and phone calls as needed. Instructors will regularly participate in all discussion boards to moderate, clarify, and provide feedback to students. An online gradebook may be maintained to keep students aware of their academic progress. Instructors will contact students who are not making satisfactory progress in the course. Students who are not participating in class may be dropped by the instructor per college policies. During the weekly lab sessions students and instructor will interact during the lab exercises as a regular laboratory course.

D. Describe how you will promote and monitor effective student-to-student contact.
Student-to-student contact will be facilitated via the use of tools such as Discussion Boards (students must read and respond to other student’s work), email availability, orientation introductions, and a non-specific Message Board available to students for the free exchange of questions, comments and ideas throughout the class. Online chat sessions (synchronous or asynchronous) may also be made available. Group activities may be indicated with a mandatory on-line "presentation" to the class. Sharing of classmates e-mails will be encouraged. During the weekly laboratory sessions students will be working in groups and this will encourage social interaction and participation.

E. Describe and give examples of how student learning will be evaluated.
Student learning will be evaluated by: 1. End-of-the chapter quizzes (on lecture material, multiple choice, true or false or essay questions) 2. End of unit exams (Essay questions on units covered in lecture) 3. Discussion Board participation (e.g.) Analyze ethical considerations on human cloning or genetic engineering. 4. Group project (e.g.) Present a disease with cellular, developmental, or molecular origins that affect our populations) 5. Final exam

F. Describe the college resources that will be required by you and your students in each of the following areas:
1. Facilities (e.g. classroom for orientation sessions, exams, etc.)
   Proctoring facilities for exams (TLC). Classroom space for orientation sessions or final exams may be used. Laboratory classroom for weekly laboratory meetings.
2. Technology (e.g. software, hardware, technical support, etc.)
   Students must have access to computers with Internet access, web browsers, Flash plug-in Macromedia, real player, or any comparable software for animations, and word processor capabilities. These are available on campus in any of the computer laboratories or in public libraries (e.g. BYKH-211). Course Management system with technical support for students and faculty.

3. Student Support Services (e.g. online library services, counseling, tutoring, DSPS, etc.)
   Students should have access to all existing support services such as TLC, DSPS, counseling, online access to library databases. Students should have access to computer support services

G. Technologies used for instruction:
   Multimedia (streaming video, audio)
   Flash
   Timed Responses
   Third-party software
   Images (jpeg, gif, etc.)

How will you ensure that instruction is accessible to students with disabilities?
Any or all of the above materials or resources might be used for instruction. For multimedia, flash, and images, materials will be reviewed or adapted for 508 compliance. For example, closed-captioned video, alt-tagging of images and/or other alternative compliant formats will be used. Additional time may be given for timed activities (for example using the Adaptive Release feature available in course management systems) or alternative assignments could be arranged for students with disabilities. Third-party software will be checked for compliance. Any materials which are not compliant will not be used as a required resource.
COUNS 111 - Introduction to College and Strategies for Success

Approval Date: 04/01/2010  Effective Term:

Department: COUNSELING
Division: Enrollment Services
Units: 1.00
Grading Option: Letter Grade
Transferability: CSU Transferable
Course is: AA/AS Degree

Contact Hours per Term:
Lecture/Discussion: 1.00

Associate Degree GE Applicability: No
Recommended Class Size: 35

Discipline/Minimum Qualifications:
Counseling

Catalog Description:
Provides students with the skills necessary to increase success in college. Topics include: college culture, goal setting, time management, study strategies, college services/resources and educational planning.

Schedule Description:
Provides students with the skills necessary to increase success in college. Topics include: college culture, goal setting, time management, study strategies, college services/resources and educational planning.

Student Learning Outcome:
1. Identify an educational goal, formulate a rationale for the goal, and develop a plan of action for the next semester.
2. Identify and evaluate resources and support services available on campus.

Course Objectives:
1. Develop a Student Education Plan
2. Develop Time Management skills
3. Explore transfer options
4. Identify effective study strategies
5. Identify personal values
6. Explain the impact of diversity in the college setting
7. Explore technical career options
8. Apply critical thinking skills to learning

Course Content Outline:
1. Understanding the College Culture
   A. College culture shock
   B. College of the Canyons campus
   C. College catalog
   D. College website
   E. COC policies and procedures
   F. Characteristics of a successful student
G. Why go to college
H. Campus Resources
I. Instructor's expectations

2. Time Management
   A. Time Management Strategies
   B. Procrastination
   C. Getting organized
   D. Managing priorities

3. Understanding Yourself and How You Learn
   A. College values
   B. Goals
   C. Critical Thinking
   D. Motivation
   E. Active Learning

4. Understanding Others in College and Diversity
   A. Cultivating relationships with professors
   B. Managing conflict
   C. Cultural diversity
   D. Generational diversity

5. Reading, Listening and Note-Taking
   A. Active reading
   B. Taking notes while reading
   C. Reading critically
   D. SQ3R
   E. OKSR
   F. Listening Barriers
   G. The Cornell System
   H. Outlining
   I. Developing shorthand
   J. Taking notes within the textbook

6. Studying and Taking Tests
   A. How to study effectively
   B. Mnemonic devices
   C. Test Anxiety
   D. Maintaining Integrity
   E. Different types of test questions: True/False, Multiple Choice, Matching, Problem Solving, Essay

7. Planning for Next Semester
   A. Financial Aid: Scholarships/grants/loans
   B. Educational options at COC
   C. Selecting a major/career option
   D. Troubleshooting schedule problems
   E. Factors affecting career choices
   F. Using the Career Center's resources and services

8. Planning for Career and a Life
   A. Transfer options
   B. Career values and goals
   C. Educational Requirements
      A. Certificate requirements
      B. Associate Degree requirements
      C. Transfer requirements
      D. Use ASSIST and CollegeSource
      E. Educational planning: SEP

Methods of Instruction:
Lecture, Distance Education:

Methods of Evaluation:
Exams/Tests/Quizzes

Written Assignments

Typical Assignments:

Reading:
Text readings Internet websites

Writing, Problem Solving or Performance:
Critical Thinking Activities

Other:
Group exercises Project

Required Materials

Examples:

Book 1
Author: Amy Baldwin  Publication Date: 2009  Edition: 2nd
Title: The Community College Experience  Publisher: Pearson

Course Preparation:

Prerequisite(s): None
Co-Prerequisite(s): None
Recommended: None

Distance Learning Addendum

A. Delivery Methods

100% Online

If Other Methods selected, describe here

B. How will the methods of instruction used in the face-to-face mode of this course be adapted for the distance learning mode? Describe and give examples of online methods of instruction, which might include course management system discussion boards; instructor developed web lectures; converted Power Point presentations; digital video clips; graphics (digital charts, diagrams, photos, images, annotated screen shots); digital animations; web guests; online reference resources; chat; e-mail; publisher prepared online materials; course cartridge materials; CD/DVD support materials; instructor web site; online library requests; textbook supplements.

The methods of instruction will be adapted by providing weekly lecture material to be posted on the course website; self-directed research on topics relevant to course content which may supplement the text; online resources linked to the course web page that link students to course materials [such as “COC Distance Education Website” “ASSIST” “CSUMentor” and “University of California”]; weekly assignments that utilize student-to-student and student-to-instructor collaboration on real-time and delayed discussion spaces [see examples below]; specific written assignments that make use of email as well as electronic quizzes and exams. An example of student work to be assigned might be the following: (1) The instructor will work with each student individually in order to complete the student education plan. This instructor will have an online counseling meeting with each student. The instructor will meet with the student. For example: on a live chat session or in the virtual classroom. The instructor will review the student’s transcript and assist the student in selecting courses to take in future semesters. The course selection will be based on the student’s individual educational goals of a certificate, AA or transfer. Each individual counseling meeting could take up to 30 minutes. (2) After you have used the ASSIST website to explore the articulation agreements between College of the Canyons and the universities, discuss your findings. Write a thread discussing what classes are required for your major. List the names of the courses that are required. Did you see a difference between the California State University and the University of California schools? (3) Write a thread explaining your feelings about careers and majors. What factors are important to you in deciding on a major and a career? What internal and external influences have affected your thoughts about majors and careers. Respond to one post.
C. Title 5 (55376) states that all approved courses offered as distance education shall include regular effective contact between instructor and students, through group and individual meetings, orientation and review sessions, supplemental seminar or study lesions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities. Describe how you will maintain regular effective contact with the students, including what will make this interaction effective.

The instructor will prepare an orientation letter which provides information about the course content and assignments, as well as computer system requirements so that students can evaluate if it is appropriate for them to take the course as an online class. The orientation letter will be available to students no later than one week prior to the scheduled beginning of the class. The instructor will respond to student e-mails and other inquiries within 48 hours. For example, if students are required to submit homework or take online quizzes weekly, a prompt reply might be within two days so that students have sufficient time to have their inquiry answered and be able to complete the assignment. The instructor will use email or discussion board postings to contact students who are not participating in required discussion board forums or who are not providing adequate answers. The communication should include suggestions on how the student can communicate more effectively on the discussion boards. The instructor will maintain electronic records containing all emails received from and sent to students, as well as any other online correspondence sent to students or posted as announcements on the course management system. The instructor may also maintain records regarding discussion boards, group and individual meetings, telephone contact, non-electronic correspondence, or other activities. This information will be maintained by the instructor in the permanent record of the course, along with the documentation for the assessment and assignment of grades. The holding period for correspondence will correspond with the College’s holding period requirements for grade assignment documentation. The purpose of this requirement is to document the level of regular effective contact between instructor and students throughout the duration of the course. The instructor may offer online virtual office hours or online chat rooms. The instructor will provide students with campus voice mail and mailbox drop information.

D. Describe how you will promote and monitor effective student-to-student contact.

The course will promote student-to-student contact by requiring the completion of assignments that ask for student collaboration and/or problem solving on topics relevant to the course [see example below]. To monitor this interaction, the instructor will either have assignments written or recorded on a discussion site or require that evidence of the collaboration be sent directly to him or her by email. The following assignment might be given as means to facilitate contact: “There are many different ways to take notes. It is important to find the note taking strategy that works best for you. Write a 200-word thread describing your current note taking method. Does it work for you? What can you do to improve your note taking skills? What was your biggest obstacle in learning how to take notes? Attach a page of notes that you have taken this semester. It does not matter for what class/or subject. After you have posted your response, respond to another student’s post.

E. Describe and give examples of how student learning will be evaluated.

Student learning will be evaluated by weekly quizzes, reading exercises, and writing assignments. The instructor will measure learning by assessing the degree to which learning objectives for each unit have been reached and demonstrated by the above methods. Learning objectives are offered for each chapter of the text used in the course and may be supplemented by the instructor as well. An example of an assessment method might be a reading exercise that asks students to complete the following assignment: “After you have researched the financial aid websites or pages of the institutions that you are thinking about applying for admission, please find the following information: What type of institutional grants and scholarships are available? Find out what kind of financial aid is available. What are the criteria for the scholarships? Do you need to make any changes in order to qualify for these scholarships? What are the deadline dates?” Ideally, as a function of completing the assignment, the student will have a thorough knowledge of the concept and therefore be able to not only explain it, but also engage in higher learning skills.

F. Describe the college resources that will be required by you and your students in each of the following areas:

1. Facilities (e.g. classroom for orientation sessions, exams, etc.)
   No classroom is required - course is 100% online. Students will be able to access existing on-ground support services.

2. Technology (e.g. software, hardware, technical support, etc.)
   Students and instructors must have regular access to computers with Internet connections, up-to-date web browsers, and word processing programs, as well as email services. Such computers are readily available through College of the Canyons’ computer labs as well as through the public library system. Technical support should be provided to students who encounter difficulties with the course management system; currently such support is provided through the TLC. The instructor must have access to a course management system (such as Blackboard) to facilitate distributing materials (syllabus, course calendar, handouts), setting up class assignments and message boards, and communicating with students (email, announcements, grade book). Technical support to instructors should be provided through Computer Support Services.

3. Student Support Services (e.g. online library services, counseling, tutoring, DSP&S, etc.)
   Students should have access to counseling, online library, DSP&S and tutoring services; currently the TLC provides online tutoring for students in this course. DSP&S services may be needed to determine Section 508 compliance of course material and delivery.

G. Technologies used for instruction:
   Multimedia (streaming video, audio)
   Timed Responses
How will you ensure that instruction is accessible to students with disabilities?

In the orientation letter, students with disabilities will be required to contact the instructor via phone, in person, traditional postal mail or email. The students will provide information on their disabilities, and the student and instructor will discuss the course and how to maximize participation in the course given the specific disability. Once the instructor learns of a specific disability, the instructor will contact the COC DSP&S to request assistance and collaboration on maximum student participation. As every class will be different, specific details on making online classes accessible will change from class to class. Additionally, technology changes exponentially. Regardless of how a class was originally configured, the instructor, when faced with students with disabilities will check with the COC DSP&S every time. Moreover, the instructor will consistently seek new technological changes and advancements that improve access for students with disabilities. Whenever possible, online homework assignments should be based upon identical problems found in the textbook to provide alternate modes of accessibility. Comprehensive exams that cover several chapters will be given to all students via the Internet. Students who may have difficulty with online evaluative activities or any other minimizing academic issues may contact the instructor and request alternative activities. For example, homework may be submitted on paper rather than online, or chapter quizzes may be proctored in the TLC as paper-based quizzes rather than online. PowerPoint slides and graphic web pages will, if needed, be converted to formats compatible with text-reading software, or it will be available in alternate formats that are Section 508 compliant.
ENGL 101 - English Composition

Approval Date:  Effective Term: Fall 2012

Department: ENGLISH
Division: Humanities
Units: 3.00
Grading Option: Letter Grade
Transferability: UC/CSU Transferable
Course is: AA/AS Degree
Repeatability: Not Repeatable
Contact Hours per Term: Lecture/Discussion: 54.00

Discipline/Minimum Qualifications:
English

Catalog Description:
Builds expository writing and critical reading skills through the composition of well-organized, full-length essays containing properly documented evidence and the analysis and evaluation of college-level readings.

Schedule Description:
Builds expository writing and critical reading skills through the composition of well-organized, full-length essays containing properly documented evidence and the analysis and evaluation of college-level readings.

Student Learning Outcome:
1. Compose persuasive, well-organized, grammatically correct full-length essays, synthesizing properly documented and relevant research and other evidence to develop and support a unified thesis.
2. Analyze and critically evaluate college-level texts for argument, structure, and rhetorical strategies.

Course Objectives:
1. analyze and critically evaluate written and other visual materials;
2. organize expository essays in an effective manner (logically, chronologically, simple to complex, least to most important, linearly);
3. support generalizations by using evidence such as relevant detail, anecdotes, and well-integrated quotations;
4. support generalizations by using evidence such as relevant detail, anecdotes, and well-integrated quotations;
5. explain and develop the link between the specific generalization and its specific supporting evidence;
6. narrow general topics to a scope appropriate to the assignment;
7. create a thesis statement to structure the essay as a whole;
8. write effective introductory and concluding paragraphs;
9. use effective transitions within and between paragraphs to connect logically ideas;
10. observe the conventions of standard written English while using a variety of sentence structures;
11. locate and critically evaluate appropriate source material;
12. use relevant and appropriate citation format;
13. use various strategies to generate and develop ideas;
14. compose well-organized responses in timed-writing situations.

Course Content Outline:

1. Academic patterns of writing:
   A. Illustration
   B. Cause/Effect
   C. Comparison/Contrast
   D. Evaluation
   E. Problem/Solution
   F. Definition
   G. Argument/Persuasion
   H. Synthesis
   I. Timed Writing

2. Critical Reading:
   A. Implied vs. Stated Thesis
   B. Drawing Inferences
   C. Relationship between Generalization and Supporting Evidence
   D. Active vs. Passive Reading
   E. Annotation
   F. Credibility of Sources
   G. Recognition of Academic Patterns of Writing

3. Writing Style:
   A. Sentence Variety
   B. Concise Writing
   C. Transitions
   D. Levels of Formality and Diction
   E. Conventions of Manuscript Preparation
   F. Citation Format
   G. Integrating Sources
   H. Paragraph Unity

Methods of Instruction:
Distance Education, Lecture:

Methods of Evaluation:
Exams/Tests/Quizzes

Quizzes and exercises. Informal reading and writing responses such as reading logs or dialectical journals. In-class timed writing. At least four formal out-of-class multiparagraph essays, for a total of at least 16-20 pages (6,000-8,000 words). At least one major revision of a previously completed essay with a self-assessment component.

Typical Assignments:
Reading:
Textbook readings: Berger, Arthur Asa. 'Sex as Symbol in Fashion Advertising.' Ehrenreich, Barbara. 'Nickle-and-Dimed: On (Not) Getting By in America.' Schor, Juliet B. 'The Overworked American.'

Writing, Problem Solving or Performance:
Essays: Write a typed, double-spaced, three-to-four-page formal academic paper with standard margins and font that analyzes a print advertisement of your choice. Briefly explain what the advertisement is selling and to whom, but focus most of your paper on how the advertisement sells its product to that group. Write a typed, double-spaced, three-to-four-page formal academic paper with standard margins and font in which you analyze the language use of a specific speech community. Write an six-to-eight-page paper that identifies a problem, presents a policy or plan of action to solve that problem, and attempts to convince an audience to enact or accept that solution. Support your claims with at least five appropriately-documented,
Other:
Portfolio: Submit a portfolio that includes revised copies of at least two essays written for this course as well as a reflection on what you have learned.

Required Materials

Examples:

Book 1
Author: Diana George and John Trimbur  
Title: Reading Culture  
Publisher: Longman

Book 2
Author: Richard Bullock  
Title: The Norton Field Guide to Writing  
Publisher: Norton

Book 3
Author: Andrea Lunsford and John Ruszkiewicz  
Title: Everything's an Argument  
Publisher: Bedford/St Martins

Book 4
Author: Gilbert Muller  
Title: Many Americas  
Publisher: Houghton Mifflin

Book 5
Author: Lisa Ede  
Title: Work in Progress  
Publisher: Bedford/St Martins

Course Preparation:
Prerequisite(s): ENGL 091  
ENGL 094  
ENGL 096  
ESL 100

Co-Requisite(s): None
Recommended: None

Document Content Review

Target Course Skills
Condition on Enrollment
Established

Faculty
Basic Content Review
Condition on Enrollment
Established

Faculty
Jennifer Brezina Deanna Davis Jia-Yi Cheng-Levine Juan Buriel Adam Kempler Denee
Pescarmona

Basic Content Review
1. Differentiate and apply appropriate academic writing strategies to compose effective, short college-level essays using documented outside sources and personal observations to develop a unified thesis with well-organized main points. 2. Formulate the kinds of inferences and connections among college-level texts and ideas that will lead to thoughtful analytical and expository writing.

Distance Learning Addendum
A. Delivery Methods
Online/Hybrid

If Other Methods selected, describe here

B. How will the methods of instruction used in the face-to-face mode of this course be adapted for the distance learning mode? Describe and give examples of online methods of instruction, which might include course management system discussion boards; instructor developed web lectures; converted Power Point presentations; digital video clips; graphics (digital charts, diagrams, photos, images, annotated screen shots); digital animations; web guests; online reference resources; chat; e-mail; publisher prepared online materials; course cartridge materials; CD/DVD support materials; instructor web site; online library requests; textbook supplements.

In the online hybrid format of the class, 50% of the instructional time will be online and 50% will take place in-person. In the online hybrid, lectures, discussion and/or assessments will take place during the face-to-face meetings, and the online time will be used for online discussions, practice of concepts introduced during the face-to-face sessions, and/or assessments. The 100% online version of the course may include eLectures, PowerPoint presentations, publisher provided content, online discussions and practice activities, assessments, and/or supplemental readings. As an example, if the objective is to write a focused, effective thesis statement, students would begin by reading the textbook section that covers thesis statements. The instructor would then provide supplementary instruction through lecture (face-to-face or eLectures, PowerPoints or handouts) and then assess the students’ understanding of the concept. This assessment could take the form of a quiz asking students about key features of thesis statements and/or students could be asked to identify and discuss examples of effective and ineffective thesis statements. Students would then be asked to practice writing thesis statements of their own, which could then be submitted through discussion board, email, or assignment/dropbox. The instructor would then provide feedback to the students about their practice thesis statements.

C. Title 5 (55376) states that all approved courses offered as distance education shall include regular effective contact between instructor and students, through group and individual meetings, orientation and review sessions, supplemental seminar or study lessons, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities. Describe how you will maintain regular effective contact with the students, including what will make this interaction effective.

In the online hybrid version of the course, the instructor will meet with students during 50% of the instructional hours for the course. During these meetings, the instructor will provide instruction, answer questions, and give feedback to students regarding their performance. In all sections, the instructor will provide an orientation letter to be posted on the Distance Learning website no later than one week before the start date of the class. This letter should include information such as class start date, class format, textbooks, required meetings, proctoring arrangements (if needed), and class login instructions. All instructors will communicate with the class as a whole at least once weekly through tools such as announcements, chats, and/or whole class emails, but will also use email, office hours, individual chats, and/or phone calls to communicate with students individually as needed. All instructors will regularly participate in discussion board discussions throughout each unit to moderate discussion, clarify concepts, and provide feedback to students. Each instructor will provide a mechanism for student questions -- through discussion boards, emails, and/or phone calls -- and will respond in a timely manner, as described in the orientation letter and/or syllabus. In all sections, the instructor will maintain an password-protected electronic gradebook (either through the course management system or through other software) that is updated weekly. Instructors will provide both numeric feedback (scores or letter grades) and comments (narrative comments, answer keys, and/or posted rubrics) for student work. Instructors will contact students who fail to make satisfactory progress in the course. Students who do not respond or who are not participating in class activities (discussion boards and/or other assignments) may be subject to being dropped from the class through the procedure outlined in the class syllabus.

D. Describe how you will promote and monitor effective student-to-student contact.
In sections that include face to face meetings, the students may interact in-person during scheduled meeting times both informally (before and after class, during breaks) and during collaborative learning activities. Students in all sections will interact at least once weekly on classwide and/or small group discussion boards. In addition to original posts, students will be required to send a specified number of replies to other students to ensure student-student interaction. In addition, students will comment on each others' essays through structured peer review activities. Students may be required to participate in other collaborative learning activities online as assigned by the instructor. Students may also interact online informally through chat, email, and "water cooler" discussion boards.

E. Describe and give examples of how student learning will be evaluated.
Student learning will be evaluated through: Formal essays (at least 20 revised pages -- examples included in the main course outline) Informal discussion board and/or journal entries (example: Send an original post of at least 200 words to the "Work, Part 1" discussion board that compares or contrasts two of the essays from the "Work" chapter of Reading Culture. Read your classmates' posts and send replies (100 words or longer) to at least two of them). Quizzes, exams, and/or other assessments of student learning (examples: multiple choice or short answer reading comprehension quizzes, timed essay writing, practice essay outlines)

F. Describe the college resources that will be required by you and your students in each of the following areas:
1. Facilities (e.g. classroom for orientation sessions, exams, etc.)
In the online hybrid version of the class, each classroom meeting may require online access and workstations for each student. Proctoring facilities may be needed for exams.
2. Technology (e.g. software, hardware, technical support, etc.)
Students and instructors must have regular access to computers with Internet connections, up-to-date web browsers, and word processing programs, as well as email services. Such computers are readily available through College of the Canyons' computer labs as well as through the public library system. Technical support should be provided to students who encounter difficulties with the course management system; currently such support is provided through the TLC. The instructor must have access to a course management system (such as Blackboard) to facilitate distributing materials (syllabus, course calendar, handouts), setting up class assignments and message boards, and communicating with students (email, announcements, gradebook). Technical support to instructors should be provided through Computer Support Services.

3. Student Support Services (e.g. online library services, counseling, tutoring, DSPS, etc.)
Students will need access to an online research database (such as Proquest) to allow them to complete research for essays. Students should have access to counseling and tutoring services; currently the TLC provides online tutoring for students in this course.

G. Technologies used for instruction:
KPET 200 - Introduction to Kinesiology

Department: KINESIOLOGY - THEORY
Division: Kinesiology/Physical Education/Athletics
Units: 3.00
Grading Option: Letter Grade
Transferability: UC/CSU Transferable
Course is: AA/AS Degree
Repeatability: No
Contact Hours per Term: Lecture/Discussion: 3.00
Associate Degree GE Applicability: No
Recommended Class Size: 35

Discipline/Minimum Qualifications:
Physical Education

Catalog Description:
Introduces the field of kinesiology as a profession and an academic discipline. Focuses on the following sub-disciplines: exercise physiology, sports nutrition, biomechanics, motor control & learning, sports medicine/athletic training, rehabilitative medicine, teaching & coaching, and sports psychology. (This course does not satisfy the physical education activity requirement for the associate degree. UC credit limitation: KPET-200 and KPET-201 combined, maximum credit one course.) (Formerly PHYSED-101)

Schedule Description:
Introduces the field of kinesiology as a profession and an academic discipline. Focuses on the following sub-disciplines: exercise physiology, sports nutrition, biomechanics, motor control & learning, sports medicine/athletic training, rehabilitative medicine, teaching & coaching, and sports psychology. (This course does not satisfy the physical education activity requirement for the associate degree. UC credit limitation: KPET-200 and KPET-201 combined, maximum credit one course.) (Formerly PHYSED-101)

Student Learning Outcome:
1. Delineate, and compare and contrast the various disciplines within kinesiology.

Course Objectives:
1. Describe the nature and scope of kinesiology as a profession and an academic discipline
2. Discuss and appreciate the role of kinesiology in society
3. Differentiate between the basic anatomical, biomechanical, and physiological foundations of kinesiology.
4. Explain the basic psychological foundations of kinesiology
5. Analyze the relationship between sport experience and education
6. Examine the scope of educational preparedness for teaching and coaching
7. Evaluate the job market for career opportunities in kinesiology.

Course Content Outline:

I. Introduction to the field of kinesiology
   
II. Basic overview of sub disciplines
III. Exercise Physiology

A. Basic anatomy and physiology of musculoskeletal system

B. Sliding Filament Theory of muscle contraction

C. Substrate utilization by muscle

IV. Sports Nutrition

A. Essential components of human diet

B. Manipulation of carbohydrate, fat, and protein and effects on performance

C. Hydration's role in performance and temperature regulation

V. Biomechanics

A. Basic Newtonian physics concepts: gravity, inertia, action-reaction

B. Forces generated during muscle contraction

C. Forces generated during human movement including torque at joints

D. Equipment design

VI. Motor Control & Learning

A. Basic anatomy of central nervous system and peripheral nervous system

B. Motor unit: innervation of muscle fibers, muscle groups

C. Classification of motor skills

D. Practice: massed, distributed, random, and blocked

VII. Sports Medicine/Athletic Training

A. Common athletic injuries

B. Injury prevention

C. Immediate care

D. Rehabilitation

VIII. Sport & Exercise Psychology

A. Scope of practice

B. Excitation and relaxation

C. Controlling stress
D. Psychophysiology of exercise
E. Exercise adherence
F. Staleness & burnout

IX. Teaching & Coaching
A. Educational levels
B. Special populations, including adaptive physical education
C. Motivation

IX. Sports & Materials Sciences
A. Resistive forces
B. Fluid dynamics
C. Clothing materials
D. Mechanics of sports implements
E. Footwear

X. Career exploration

Methods of Instruction:
Distance Education, Lecture:

Methods of Evaluation:
Exams/Tests/Quizzes
Projects
Laboratories

Typical Assignments:
Reading:
- 
Writing, Problem Solving or Performance:
- 
Other:
Students will shadow a professional in the subdiscipline of kinesiology they are considering and prepare a presentation, including visual aids.

Required Materials
Examples:
Book 1
Author: Kamen, Gary
Title: Foundations of Exercise Science
Publication Date: 2001
Publisher: Lippincott, Williams & Wilkins
Edition: 1st

Book 2
Author: Wuest
Title: Foundations of Physical Education, Exercise Science, & Sport
Publication Date: 2005
Publisher: McGraw Hill
Edition: 15th

Book 3
Author: Hoffman
Title: Introduction to Kinesiology
Publication Date: 2005
Publisher: Human Kinetics
Edition: 2nd

Course Preparation:
Prerequisite(s): None
Co-Requisite(s): None
Recommended: None

Distance Learning Addendum
A. Delivery Methods
Online/Hybrid

If Other Methods selected, describe here

B. How will the methods of instruction used in the face-to-face mode of this course be adapted for the distance learning mode?
Describe and give examples of online methods of instruction, which might include course management system discussion boards; instructor developed web lectures; converted Power Point presentations; digital video clips; graphics (digital charts, diagrams, photos, images, annotated screen shots); digital animations; web guests; online reference resources; chat; e-mail; publisher prepared online materials; course cartridge materials; CD/DVD support materials; instructor web site; online library requests; textbook supplements.
Lectures will be provided online via course management systems. Lectures will include diagrams, photographs, and video clips as appropriate; most will be converted Power Point presentations. Students will be provided a series of links to further enhance their access to information and educational material. Discussion boards, online chats, and regular email communication will be integral parts of the learning process as well. And example of a discussion board would be the following: find two California State University campuses that offer kinesiology degrees and compare there course offerings. Which program has more options? Which program requires more units? Which program offers more elective choices? And example of a live chat would be: which sub discipline do you find most interesting so far and why? Based on our discussions and your individual research, which school are you considering transferring to? Do you have any questions regarding the academic and professional requirement for your chosen career path?

C. Title 5 (55376) states that all approved courses offered as distance education shall include regular effective contact between instructor and students, through group and individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities. Describe how you will maintain regular effective contact with the students, including what will make this interaction effective.
Whereas the bulk of lecture material will be provided online, inherent to kinesiology is physical activity component. Students will perform all laboratory activities under the supervision of the instructor. Laboratory activities could include: proper stretching techniques, resting and exercise heart rate measurements, blood pressure measurements, flexibility measurements, body composition analysis, and balance assessments. All students will be required to complete the less arduous activities, with volunteers solicited for the more arduous ones. In the event no student volunteers, the instructor will provide a demonstrator. These activities will require a minimum of six face-to-face hours per semester. Discussion boards will be facilitated and monitored by the instructor weekly and/or by subject, whichever is greater. Instructor will review all postings and provide feedback on each discussion board for each student. Live chat discussions will be facilitated by the instructor in real time, posing questions and probing answers offered by students. Instructor will always be available via email, office hours, and telephone. Finally, all students will give a face-to-face presentation of a professional in the field whom they shadowed. Students will be encouraged to attend all other classmates' presentations. The presentations are
Generally 7-10 minutes per student, therefore face-to-face contact for this portion of the course could vary from semester to semester - the minimum would be two hours, with up to approximately six hours required for full sections.

D. Describe how you will promote and monitor effective student-to-student contact.
Discussion board postings will include a response to the instructor’s question as well as responses to two classmates’ postings, thereby encouraging dialogue between students. Students will be encouraged to engage in dialogue during live chats rather than simply exchanging messages with the instructor. The instructor will monitor real-time discussions among students and guide discussion so as to ensure adherence to topic. Students will work in groups during all laboratory activities. Most activities will require human support. For example, students will learn how to measure resting and exercising heart rates, blood pressure, and flexibility. They will perform these measurements on each other. Students will be encouraged to change partners between and within activities; this will provide a better learning environment and encourage more interaction.

E. Describe and give examples of how student learning will be evaluated.
Students will be evaluated based on their performance, laboratory activities, discussion board postings, participation in live chats, and final projects. Students will be given study guides detailing the learning objectives for each unit. During live chats, feedback will be provided in real time. The final shadowing project will be evaluated based on adherence to provided guidelines, visual aids, and overall quality. Each student will receive a written evaluation of their presentation including points earned in each category.

F. Describe the college resources that will be required by you and your students in each of the following areas:
1. Facilities (e.g. classroom for orientation sessions, exams, etc.)
   Classroom for orientation. Access to fitness center and/or gymnasium for laboratories/activity-based sessions.
2. Technology (e.g. software, hardware, technical support, etc.)
   Blackboard, or like, course management system will be used.
3. Student Support Services (e.g. online library services, counseling, tutoring, DSPS, etc.)
   Students will be able to access existing on-ground student support services. DSP&S resources may be needed to determine Section508 compliance of course materials and delivery systems. The TLC may be utilized when extraordinary student testing needs are required.

G. Technologies used for instruction:
Multimedia (streaming video, audio)

How will you ensure that instruction is accessible to students with disabilities?
Video materials, provided online or during face-to-face sessions, will be reviewed by Scott McAfee of DSP&S or other such COC administrative staff deemed qualified to determine Section 508 compliance. Any materials deemed noncompliant will be provided in an alternative format that is Section 508 compliant. If the noncompliance issue cannot be satisfactorily resolved, then the video component will be removed from the course content. Comprehensive online exams will be given to all students. Students who may have difficulty with online evaluative activities, may contact the instructor and request alternative activities. For example, exams may be proctored in the TLC and taken in a paper-based format. Power Point presentations will be converted to formats compatible with text-reading software or will be provided in alternate formats that are Section 508 compliant.
SOCI 101 - Introduction to Sociology

Approval Date: 11/19/2009  Effective Term: Fall 2010

Department: SOCIOLGY
Division: Social Science & Business
Units: 3.00
Grading Option: Letter Grade
Transferability: UC/CSU Transferable
Course is: AA/AS Degree
Repeatability: Not Repeatable
Contact Hours per Term:
Lecture/Discussion: 54.00

Discipline/Minimum Qualifications:
Sociology

Catalog Description:
Examines small group interactions and cultural patterns of American and other societies using the conceptual, theoretical, and methodological principles and applications to explain how values, roles, norms, social interaction, and social inequality as well as other concepts influence individuals, groups, and society.

Schedule Description:
Examines small group interactions and cultural patterns of American and other societies.

Student Learning Outcome:
1. Analyze contemporary social issues.

Course Objectives:
1. Define sociological terms and concepts.
2. Compare and contrast the three major theoretical perspectives used in the discipline to understand human behavior.
3. Distinguish the strengths and weaknesses of the theoretical and methodological perspectives used in the discipline.
4. Examine the concept of social norms and determine why they exist in every culture worldwide, and how they function as social control.
5. Analyze human social interaction based on verbal and non-verbal communication, as determined by culturally shared meanings.
6. Contrast cross-cultural examples of human behavior, especially cultural differences regarding customs, traditions, and values.
7. Examine the subfields of sociology and discuss their relationship to understanding both personal and structural changes to human behavior.

Course Content Outline:

1. Understanding Sociology
   Definitions.
   Historical, social, and political events leading to the rise of the discipline.
   The development of American sociology.
"Common sense" assumptions versus sociological inquiry.
Sociology versus other social sciences.
The "sociological imagination."
Objectivity and subjectivity.

2. Sociology as a Social Science
The importance of theoretical paradigms.
Structural Functionalism.
Conflict Theory.
Symbolic Interactionism.
Sociology as a scientific discipline.
Research methodology.
Surveys.
Populations.
Samples.
Field studies.
Secondary sources.
Experiments.
Ethical concerns.

3. Culture
Material culture.
Non-material culture.
Values.
Symbols.
Beliefs.
Language.
Sapir-Whorf Hypothesis.
Norms.
Folkways.
Mores.
Language.
Symbols.
Technology.
Ideal culture versus real culture.
Cultural universals.
Culture shock.
Cultural lag.
Cultural relativism.
Ethnocentrism.
Subcultures.
Countercultures.

4. Socialization
Nature versus nurture.
Social learning and its relationship to case studies of extreme isolation.
Social learning versus sociobiology.
Socialization theories of George H. Mead (stages of socialization development).
Charles H. Cooley theory "looking glass self."
Socialization implications of Sigmund Freud's theory of id, superego, and ego.
Types of socialization.
Primary.
Anticipatory.
Re-socialization.
Total institution.
The agents of socialization.
Ethnomethodology.
Dramaturgy.
Presentation of self.
Impression management.
Front Stage behavior.
Backstage behavior.
5. Social Interaction and the Social Construction of Reality
- Social construction of reality.
- Social interaction.
- Primary group.
- Secondary group.
- Reference group.
- Ascribed status.
- Achieved status.
- Master status.
- Roles.
- Role strain.
- Role conflict.
- Types of societies.
- Hunting and gathering societies.
- Horticultural societies.
- Agrarian societies.
- Industrial societies.
- Post-industrial societies.

6. Social Organizations
- Dyad.
- Triad.
- Aggregate.
- In-group.
- Out-group.
- Organizational structure of large, formal organizations.
- Ideal type.
- Bureaucracy.
- Peter Principle.
- Trained incapacity.
- Oligarchy.
- Alienation.

7. Deviance
- Social deviance.
- Normative standards.
- Social control.
- Informal sanctions.
- Formal sanctions.
- Social stigma.
- Crime.
- Street crime.
- White-collar crime.
- Organized crime.
- Victimless crimes.
- Uniform crime index.
- Biological theories of deviance.
- Anomie Theory.
- Strain Theory.
- Labeling Theory.
- Cultural Transmission Theory.
- Differential Association Theory.

8. Social Stratification
- Social stratification.
- Social inequality.
- Caste (or closed) system.
- Meritocracy (or open) system.
- Class (or mixed) system.
- Prestige.
- Power.
- Authority.
- Social class.
- Socio-economic status (SES).
Life chances.
Social indicators of social stratification.
Class distinctions in the United States.
Upper-upper class.
Lower-upper class.
Upper-middle class.
Lower-middle class.
Working class.
Lower class.
Under class.
Social mobility.
Absolute poverty.
Relative poverty.
Class consciousness.
False consciousness.

9. Race and Ethnicity
Social construction of race.
Minority group.
Racial group.
Ethnic group.
Stereotypes.
Scapegoats.
Self-fulfilling prophecy.
Racism.
Institutionalized racism.
Prejudice.
Discrimination.
De jure Discrimination.
De facto Discrimination.
Dominant and subordinate group relations.
Melting Pot Theory.
Assimilation.
Acculturation.
Segregation.
Genocide.
Separatism
Pluralism.
Multiculturalism in the United States.

10. Sex and Gender
Sex and gender.
Gender socialization.
Social construction of gender.
Gender roles.
Gender socialization and the agents of socialization.
The "gendered" nature of the United States.
Gender stratification.
Gender inequality.
Sexism.
Institutionalized sexism.
Occupational segregation.
Glass ceiling.
Double-jeopardy.
Feminization of poverty.
Sexual harassment
Gender violence.

11. Government and Politics
Political models.
Authority.
Power.
Charisma.
Interest groups.
Legal-rational authority.
Pluralist model.
Elite model.
Lobbying.
Political Action Committees (PACs).
Political system.
Political party.
Power Elite.
Traditional authority.
Political socialization.
State.
Nation.
Legitimacy.
Oligarchy.
Democracy.
Totalitarianism.

12. Family
Historical and social functions of the family.
Nuclear family.
Extended family.
Family of orientation.
Family of procreation.
Endogamy.
Exogamy.
Homogamy.
Marriage.
Monogamy.
Polygamy.
Serial monogamy.
Domestic partnership.
Cohabitation.
Single-parent family.
Incest taboo.
Patriarchy.
Patrilineal descent.
Matriarchy.
Matrilineal descent.
Divorce.
Domestic violence.

13. Aging
Social Gerontology.
Cohorts.
Age grade.
Life course.
Life expectancy.
Life span.
Biological age.
Chronological age.
Psychological age.
Social age.
Ageism.
Caregiving.
Sandwich generation.
Death and dying.
Activity Theory
Disengagement Theory.
Modernization Theory.

14. Education
Cultural functions of education.
Gender socialization and education.
Cultural transmission of culture.
Education and social mobility.
Education and cross-cultural comparisons.
Schools as bureaucracies.
Schools as secondary groups.
Role of parents, peers, and teachers.
Home schooling.
School vouchers.
Social class and education.
Hidden curriculum.
Tracking.
Illiteracy.
Degree inflation.
Institutionalized inequalities (e.g. classism, racism, and sexism).

15. Religion
Cultural functions of religion.
Religious beliefs.
Religious experiences.
Rituals.
Profane.
Sacred.
Ecclesia.
Protestant ethic.
Church.
Denomination.
Cult.
Sect.
Animism.
Theism.
Polytheistic.
Monotheistic.
Supernaturalism.
Creationism.
Secularism.
Civil religion.
Fundamentalism.

16. Collective Behavior and Social Change
Collective action.
Collective behavior.
Social movement.
Crowd.
Mobs.
Political revolution.
Social revolution.
Public opinion.
Modernization.
Social change.

Methods of Instruction:
Distance Education, Lecture:

Methods of Evaluation:
Exams/Tests/Quizzes
Written Assignments
Typical Assignments:

Reading:
Textbook Readings Supplemental Readings

Writing, Problem Solving or Performance:
Written Examples: 1) How does gender create a social reality of norms, values, and beliefs that promote social institutions as well as at the same time perpetuate a system of social stratification? 2) What is the relationship between impression management and the looking glass self? Give an example.

Other:
Research Project.

Required Materials

Examples:

Book 1
Author: Henslin, James
Title: Sociology: A Down-to-Earth Approach
Publisher: Allyn and Bacon
Publication Date: 2011 Edition: 11th

Book 2
Author: Macionis, John J.
Title: Society: The Basics
Publisher: Prentice-Hall
Publication Date: 2009 Edition: 10th

Book 3
Author: Henry Tischler
Title: Introduction to Sociology
Publisher: Wadsworth Publishing
Publication Date: 2011 Edition: 10th

Course Preparation:
Prerequisite(s): None
Co-Requisite(s): None
Recommended: None

Distance Learning Addendum

A. Delivery Methods
Online/Hybrid 100%

If Other Methods selected, describe here

B. How will the methods of instruction used in the face-to-face mode of this course be adapted for the distance learning mode? Describe and give examples of online methods of instruction, which might include course management system discussion boards; instructor developed web lectures; converted Power Point presentations; digital video clips; graphics (digital charts, diagrams, photos, images, annotated screen shots); digital animations; web guests; online reference resources; chat; e-mail; publisher prepared online materials; course cartridge materials; CD/DVD support materials; instructor web site; online library requests; textbook supplements.

All of the same objectives, content, and integrity will be met in sections with distance learning delivery. Students are expected to: 1. Read the textbook and any supplementary reading materials. 2. Participate in mandatory classroom meetings for hybrid/pace formats. 3. Demonstrate writing proficiency by concise written correspondence with the professor and other students and completion of written homework. 4. Complete and electronically submit written assignments. 5. Participate in synchronous or asynchronous group discussion via chat applications or discussion forums, as well as individual communications.
via email, demonstrating appropriate social and writing skills. Student learning will be enhanced by the use of online discussion groups which will provide critical thinking forums for student discussion and debate by requiring students to respond to instructor-posted topics as well as to reply to other students' postings. Written assignments will incorporate internet technology into the research and critical thinking process. Internet research and web-based activities will supplement the text, providing deeper exploration of theories and concepts in sociology. Students will be required to complete homework assignments online and submit them to the instructor for grading and feedback. An example of this type of assignment would be to obtain an article from the internet that discusses sociological issues and to summarize and discuss the theory that applies to the content of the article. Students may be required to post their article and critique for a discussion of the usefulness of the theory with regard to the topic. Another example would be to commit an act of minor deviance and analyze how society reacted to this act and apply theory to the discussion. Students may be required to post their assignment for the class to discuss. A third example would be to view a feature film and analyze the sociology concepts presented in the film and to classify the filmmaker as a structural functionalist, symbolic interactionist, or conflict theorist. Students would cite specific examples from the film as to why students classified them this way. Online quizzes may be required to provide students with opportunities to assess their ongoing progress. If possible, self-scoring tutorials and/or online quizzes should be utilized to provide feedback more quickly to students. Students may be required to work individually or to collaborate in groups to evaluate research in sociology. Written analysis papers will be submitted to the instructor. Email, phone, in person meetings, and or Blackboard's group pages may be used to facilitate group interaction. Publisher-prepared PowerPoint slide presentations may be available to supplement and enhance student comprehension of text material. This material may be augmented with instructor-developed PowerPoint slides or web pages featuring outlines and/or graphics. All PowerPoint slides and graphic pages will conform to Section 508 requirements. Publisher-provided CD/DVD and or internet resource materials may be available with the textbook which reinforces understanding of sociological concepts covered in the textbook and provides students with additional opportunities to study more efficiently and learn interactively. These resources may be utilized for instructor-designated assignments and/or utilized by students for self-directed study.

C. Title 5 (55376) states that all approved courses offered as distance education shall include regular effective contact between instructor and students, through group and individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities. Describe how you will maintain regular effective contact with the students, including what will make this interaction effective.

The instructor will prepare an orientation letter which provides information about the course so students can evaluate if it is appropriate for them to take the course as an online class. The orientation letter will also include information instructing students where and how they should logon to begin the class and provide a link to the COC distance learning website with the Blackboard tutorial for students to complete prior to logging on. The orientation letter will be posted online and available to students no later than one week prior to the scheduled beginning of the class. For hybrid/PACE sections students will be required to attend five mandatory on-campus class meetings during the semester. These meetings will provide opportunities for person-to-person contact between the instructor and students, including reviews of subject material and student-directed questions. Exams may be administered at these class meetings. The instructor will respond to student e-mails and other inquiries in a manner that is sufficient for students to maintain adequate progress in the course (e.g., replying to all email inquiries regarding an exam quickly in order to provide students adequate study time.) The instructor will use email to contact all students who fail to complete required assignments or who fail to complete them satisfactorily, or who fail to attend mandatory face-to-face class meetings. The instructor will contact these students in a timely manner to determine an appropriate course of action. Students who fail to respond to these emails and are not participating in required class activities may be subject to withdrawal from the course under procedures established by the instructor. These procedures should be clearly outlined in the orientation letter and/or syllabus. The instructor will maintain electronic copies of all emails received from and sent to students, as well as any other online correspondence such as announcements posted on the course management system (CSM). The instructor may also maintain records regarding discussion boards, group and individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact, non-electronic correspondence, or other activities. This information will be maintained by the instructor in the permanent record of the course, along with the documentation for assessment and the assignment of grades. The holding period for correspondence will be consistent with the College's holding period requirements for grade assignment documentation. The purpose of this requirement is to document the level of regular effective contact between instructor and students throughout the duration of the course. Student monitoring and contact online will be maintained through the use of email, discussion boards, assignment drop box, and other tools which may be available to assist in tracking student participation. The instructor will participate in on-line discussions as necessary to stimulate critical thinking.

D. Describe how you will promote and monitor effective student-to-student contact.

E-mail, group pages, and or discussion boards will allow for students to contact other students to share ideas and experiences. Students will be required to participate in and respond to discussion board forums. Students may be required to respond to the responses of other students on discussion board topics. The instructor will monitor discussion board traffic and content. The instructor will use email to contact students who are not participating in required discussion board forums or who are not providing adequate answers. The email should include suggestions on how the student can communicate more effectively on the discussion boards. In hybrid/PACE sections students will be required to attend five mandatory on-campus meetings. These meetings will provide opportunities for person-to-person contact between students, including reviews of subject material and
student-directed questions. These meetings may also include group work or other activities. Students will be encouraged by the instructor to utilize discussion boards or chat rooms to ask questions specifically related to chapter content and chapter assigned homework. Students will be encouraged by the instructor to post responses to questions by other students and to provide peer-to-peer assistance. Students may be required to participate in on-line group research and/or analytical projects. These projects may be completed and posted online, where they may be reviewed by other students for critical analysis and comments.

E. Describe and give examples of how student learning will be evaluated.
The instructor may evaluate students based upon participation and responses in discussion board forums. Evaluation may include quantitative as well as qualitative factors. For example, students may be required to post a minimum of three responses each week to instructor-posted discussion board forums or comments made by other students on discussion boards. They may be required to include in their response whether they agree or disagree with a particular point and to include at least three reasons to support their position. For hybrid/PACE sections students may be evaluated utilizing testing methods similar to those in the same on-ground classes. This includes short answer or essay questions, multiple choice questions, or true-false questions. For 100% online sections students will be evaluated using Blackboard’s test manager. Through Blackboard or publisher websites students may have access to self-assessment tools such as self-scoring tutorials, online quizzes, and interactive homework problems which will be used to gauge student progress and to identify weak areas pertaining to their overall breadth of knowledge and comprehension of specific topics related to each chapter of study. Research and analytical projects may be assigned individually or in groups and submitted electronically for evaluation and comment by the instructor and/or other students.

F. Describe the college resources that will be required by you and your students in each of the following areas:

1. Facilities (e.g. classroom for orientation sessions, exams, etc.)
   For hybrid/PACE sections a classroom will be needed for the five on campus class meetings. No facilities will be needed for 100% online sections.

2. Technology (e.g. software, hardware, technical support, etc.)
   Blackboard or the current CMS used by COC will be used for all distance learning sections. The CMS may also utilize publishers’ modules designed to support and compliment a specific textbook. Online technical support, including answering student and faculty inquiries, may be provided by COC distance learning staff members. Technical support may also be available from publisher-sponsored sources.

3. Student Support Services (e.g. online library services, counseling, tutoring, DSPS, etc.)
   Students will be able to access existing on-ground student support services, including the TLC during both daytime and evening hours. In special circumstances, TLC resources may also be utilized to proctor exams for students who receive permission from the instructor to take an exam outside of scheduled exam times. DSP&S resources may be needed to determine Section 508 compliance of course materials and delivery systems.

G. Technologies used for instruction:
   Multimedia (streaming video, audio)
   Flash
   Timed Responses
   Third-party software
   Images (jpeg, gif, etc.)

How will you ensure that instruction is accessible to students with disabilities?
Publisher-provided modules may be used in conjunction with the CMS. These modules are primarily based upon content found in the textbook. These modules will be reviewed by DSP&S or such other COC administrative staff deemed qualified to determine Section 508 compliance. Any noncompliance issues noted will be discussed with the publisher providing the modules to determine an appropriate course of action. This may include changing the module itself or providing the information in an alternate format that is Section 508 compliant. If the noncompliance issue cannot be satisfactorily resolved, then the component of the module giving rise to the noncompliance will be removed from the course content. Students who may have difficulty with online evaluative activities may contact the instructor and request alternative activities. For example, homework may be submitted paper-based rather than online, or chapter quizzes may be proctored in the TLC and taken as paper-based quizzes rather than online. PowerPoint slides and graphic web pages will be converted to formats compatible with text-reading software or will be provided in alternate formats that are Section 508 compliant. Flash-based content used in the course will be provided in alternate formats that are Section 508 compliant.
WELD 093 - Intermediate Metal Fabrication

Approval Date: 03/06/2008  Effective Term: Fall 2008

Department: WELDING  
Division: Career Technical Education  
Units: 2.00  
Grading Option: Letter Grade  
Transferability: CSU Transferable, and Not Transferable  
Course is: AA/AS Degree  
Repeatability: 
Contact Hours per Term:  
Lecture/Discussion: 1.00  
Lab: 3.00  
Associate Degree GE Applicability: No  
Recommended Class Size: 35

Discipline/Minimum Qualifications:  
Welding

Catalog Description:  
Second in a three-part series of courses examining the principles and practices of metal fabrication. Emphasis is placed on safe proper operation of bending, turning, cutting, milling and related equipment. Students are exposed to enhanced layout and design techniques used to fabricate basic metal projects.

Schedule Description:  
Second in a three-part series of courses examining the principles and practices of metal fabrication

Student Learning Outcome:  
LECTURE:  
1. Evaluate common metal working techniques and associate which best practices apply to constructing metal required projects.  
LAB:  
1. Apply metalworking skills to construct assigned fabricated projects to recognized shop standards using common hand tools, shop equipment and common welding processes.

Course Objectives:  
LECTURE:  
1. Compare and contrast how technology has influenced common metal casting techniques and practices over the past 30 years.  
2. Explain how the process of forging is applied in the manufacturing of common industrial parts and components.  
3. List the common types of heat treatment processes used in industry and describe the effects they have on common metal alloys.  
LAB:  
1. Employ proper safety practices of working in and around metalworking lathe and milling machine
2. Operate sheet metal working equipment per recognize safety practices to construct assigned metal fabrication projects.
3. Operate a metal working lathe per recognize safety practices to construct assigned metal projects.
4. Prepare and apply a broaching operation as per recognized shop practice.
5. Operate a milling per recognize safety practices to construct assigned metal projects.
6. List and describe common nontraditional machining applications used by industry.

**Course Content Outline:**

1. Review
   - Basic Metallurgy
   - Understanding blueprints/drawings
   - Cutting Metal
   - Common Welding Processes

2. Safety Practices
   - Practicing Metalworking Safety
   - General Safety Practices
   - Machine Operation Safety
   - Fire Safety

3. Sand Casting
   - History
   - Patterns
   - Molding Sand
   - Tools and Equipment
   - High Density Molding
   - Sand Casting Safety

4. Metal Casting Techniques
   - Selection of Casting Technique
   - Precision Casting
   - Semi-Precision Processes
   - Rapid Prototyping

5. Sheet Metal
   - Patterns
   - Cutting Sheet Metal
   - Bending Sheet Metal
   - Layout
   - Sheet Metal Safety

6. Cold Forming Metal Sheet
   - Cutting Operations
   - Shearing
   - Blanking
   - Punching and Piercing
   - Forming Operations
   - Drawing Operations
   - Hydroforming
   - Stretch Forming

7. Forging
   - Hand Forging
   - Lighting a Gas Forge
   - Forging Operations
   - Industrial Processes
   - Forging Safety

8. Heat Treatment of Metals
   - Types of Processes
   - Heat Treating Furnaces
   - Hardening Carbon Steel
   - Tempering Carbon Steel
   - Case Hardening
   - Heat Treatment Safety

9. Metal Lathe
   - Lathe Size
   - Major Parts of a Lathe
   - Preparing the Lathe for Operation
D. Lathe Cutting Tools
E. Cutting Speeds and Feeds
F. Work Holding Attachments
G. Using Lathe Chucks
H. Plan Turning and Turning to a Shoulder
I. Lath Safety

10. Cutting Tapers and Screw Threads on a Lathe
   A. Taper Turning
   B. Calculating Setover
   C. Measuring Tailstock Setover
   D. Cutting Screw Threads on a Lathe
   E. Lathe Safety

11. Other Lathe Operations
   A. Drilling and Reaming
   B. Boring
   C. Knurling
   D. Filing and Polishing
   E. Using a Lathe Mandrel
   F. Industrial Applications
   G. Lathe Safety

12. Broaching Operations
   A. Broaching Equipment
   B. Advantages of Broaching
   C. Keyway Broaching
   D. Broaching Safety

13. Milling Machines
   A. Milling Cutters
   B. Cutting Speeds and Feeds
   C. Cutting Fluids
   D. Working Holding Attachments
   E. Milling Operations
   F. Vertical Milling Machines
   G. Industrial Applications
   H. Milling Safety Practices

14. Nontraditional Machining Techniques
   A. Wire Cutting
   B. Chemical Machining
   C. Electron Beam
   D. Laser Beam Machining
   E. Ultrasonic Machining

Methods of Instruction:
Lab, Lecture:

Methods of Evaluation:
Exams/Tests/Quizzes
Skill Demonstrations

Typical Assignments:
Reading:
Text reading Trade journal reading
Writing, Problem Solving or Performance:
Word problems as related to measurement and layout Estimating costs as related to metal fabrication Skill demonstrations
Required term project

**Required Materials**

**Examples:**

**Book 1**
- **Author:** John R. Walker  
  **Publication Date:** 2003  
  **Edition:** 3rd  
- **Title:** Exploring Metalworking  
  **Publisher:** Goodheart Wilcox

**Book 2**
- **Author:** John R. Walker  
  **Publication Date:** 2004  
  **Edition:** 8th  
- **Title:** Modern Metalworking  
  **Publisher:** Goodheart Wilcox

**Book 3**
- **Author:** John Walker  
  **Publication Date:** 2004  
  **Edition:** 5th  
- **Title:** Machining Fundamentals  
  **Publisher:** Goodheart Wilcox

**Other:**
- Safety glasses  
- Safety shoes  
- Measurment instruments

**Course Preparation:**
- **Prerequisite(s):** WELD 092  
- **Co-Requisite(s):** None  
- **Recommended:** None

**Document Content Review**

**Target Course Skills**

**Condition on Enrollment**
- Established

**Faculty**
- Tim Baber

**Basic Content Review**

1. Compare and contrast how technology has influenced common metalworking industries over the past 30 years.  
2. Identify shop hazards and related safety zones located nearby metalworking related equipment.  
3. Analyze the physical and mechanical properties of ferrous and nonferrous metals.  
4. Detail and explain the elements of common drawings and the type of information they convey to the reader.  
5. Compare and contrast the US Customary and the ISO Metric measuring systems.  
6. Practice safe and proper use of common shop hand tools and equipment.  
7. Describe “best practices” techniques in the effective operation of cutting equipment.  
8. Categorize common use metal fasteners and how they are best applied to fabricated components.  
9. Identify industry standards as related to customary and metric thread systems.  
10. Identify common industry grinding equipment and how they applied in the metal fabrication industries.  
11. List and evaluate the most common types of welding processes used in today’s metal fabrication industries.