
Noncredit Courses

NAJ 001

Public Safety Careers Exploration

This course provides an orientation to the dynamic field of public safety services and career paths. Topics include survey of the history and development of public safety agencies, ethical and moral standards of service members, types of employment opportunities, education and training requirements. Students receive guidance in individual assessment of suitable careers and develop personal education plans.

0 Units

8 Lecture hours

NAJ 002

Public Safety Officer Employment Readiness: Oral Interview and Personal History

This course equips students with knowledge and practical guidance in the pre-employment background investigation process for careers in public safety. Students learn how to thoroughly complete the Personal History Statement. Mock interviews and evaluations reinforce oral communication skills, and guidance in professional conduct prepares students to confidently navigate the job application process.

0 Units

8 Lecture hours

NAJ 003

Public Safety Officer Lifetime Wellness and Stress Management I

This course offers principles of physical fitness and mental health for students preparing for careers in public safety. Physical wellness topics include principles of physical conditioning, foundations of balanced nutrition, common medical concerns, and elements of the Physical Agility Test (PAT). Mental health topics include stress physiology, importance of social support, effects of substance use, and stress management techniques. Students gain awareness of the integrated nature of mind-body health and develop personal fitness programs.

0 Units

8 Lecture hours

NAJ 004

Introduction to Laws of Arrest/Search and Seizure

This course is an introduction to key federal and state constitutional laws

that inform the authority, liability, and responsibilities of public safety agencies in conducting arrests, searches, and seizures. Students gain an overview of the laws of arrest, types of searches and seizures, and their respective execution procedures.

0 Units

4 Lecture hours

NAJ 005

Fundamentals of Report Writing

This course introduces the critical functions of investigative reports and the responsibility of Public Safety professionals in preparing complete and accurate reports. Students learn the components of an effective investigative report, review essential grammar and writing mechanics, and practice composing a concise report.

0 Units

8 Lecture hours

NAJ 006

Public Safety Officer Lifetime Wellness and Stress Management II

This course reinforces personal disciplines in maintaining physical and mental wellness for Pre-Academy students and prospective police cadets. A practicum companion to NPAC 003 Lifetime Wellness and Stress Management I, this course emphasizes physical performance training to meet specific requirements of the California Commission on Peace Officer Standards and Training.

0 Units

6 Lecture hours

NAJ 007

PELLETB: Exam Preparation

This is an academic test preparation course for Pre-Academy students seeking admissions to the Police Academy. Students gain an overview of the components of the POST Entry Level Law Enforcement Test Battery (PELLETB) and are guided in practice exercises with sample questions.

0 Units

4 Lecture hours

NAJ 008

Fundamentals of Law Enforcement/Individual Study (Formerly NVOC 008)

This course is designed to provide law enforcement students or those involved in a related public service subject to expand on their knowledge in the major points of law enforcement. Topics include history and general development of law enforce-

ment, ethical and moral standards, California law, and other related issues. Students will receive individualized instruction tailored to their plan of study.

0 Units

1 to 500 Lab hours

NART 005

Theatre Production Workshop (Formerly NVOC 005)

This course will introduce students to all aspects of preparing for and presenting a full theater production. Topics covered will include technical set-up of the stage, the dress rehearsal, pre-show preparation, techniques for striking the set and the special needs of a traveling show.

0 Units

18 Lecture hours

18 Lab hours

NART 285

Graphic Design Skills Development (Formerly NVOC 285)

This course complements the GDSN lab and lecture courses and is designed to provide an additional opportunity for students to practice concepts covered in the lab and lecture courses and enhance their Graphic Design work in preparation of their portfolios. These instructional activities are not available in the regular lecture/lab courses and are not required for the grade in the courses. It is recommended for students who have previously or are currently enrolled in any Río Hondo College Graphic Design course with a prefix of ART or GDSN.

0 Units

1 to 400 Lab hours

NART 291

Career Exploration: Graphic Design I: History (Formerly NVOC 291)

Advisory: READ 022 or appropriate assessment

This course is intended for students interested in the exploration of a career in Graphic Design. This course is the first in a series of 4 courses and is an abbreviated survey of the origins of the Graphic Design profession from the time of Gutenberg through the Industrial Revolution into the modern Digital Era.

0 Units

12 Lecture hours

NART 292
Career Exploration: Graphic Design II: Process
(Formerly NVOC 292)

Advisory: READ 022 or appropriate assessment

This course is intended for students interested in the exploration of a career in Graphic Design. This course is the second in a series of 4 courses and is an overview of the practices and tasks involved in the process of developing a graphic design solution.

0 Units
12 Lecture hours

NART 293
Career Exploration: Graphic Design III: Academic Pathways
(Formerly NVOC 293)

Advisory: READ 022 or appropriate assessment

This course is intended for students interested in the exploration of a career in Graphic Design. This course is the third in a series of 4 courses and is an overview of the academic pathways available to students interested in the Graphic Design profession.

0 Units
12 Lecture hours

NART 294
Career Exploration: Graphic Design IV: Career Paths
(Formerly NVOC 294)

Advisory: READ 022 or appropriate assessment

This course is intended for students interested in the exploration of a career in Graphic Design. This course is the fourth in a series of 4 courses and is an overview of the general career pathways available to students interested in the Graphic Design profession.

0 Units
12 Lecture hours

NBAS 004
General Academic Advisement

Courses designed to assist awareness of college programs and services and exercising good judgment in the selection of classes and an academic path. Topics can include basic skills assessment, campus life, academic and career choices, and other related subjects.

0 Units
18 Lecture hours

NBAS 005
Personal and Career Exploration

Courses to increase awareness of processes for personal and career growth. Intellectual, social, emotional, and physical development; personal values clarification; decision making; identification of needs and methods of satisfying; human sexuality and family life; and accept-

ing and assuming responsibility for own behavior; and investigation into career and life planning alternatives can be explored. Included can be diagnostic testing, survey of interests, and capabilities, and development of positive self-image through group interaction.

0 Units
18 Lecture hours

NBAS 008
Personal Learning Skills/Basic Skills

This course assists the student to become more effective and efficient in developing skills and knowledge necessary to function in a work setting. Skills may include psychomotor skills, communication skills and computer software skills. Opportunities to develop critical thinking skills in simulated situations are provided. The student may use computer assisted instructional programs, word processing, equipment related to the work setting, audiovisual materials and computer software to meet program objectives. Faculty and peers will provide tutoring services and assist students in completing assignments.

0 Units
120 Lecture hours

NBAS 009
Supervised Tutoring in College Courses

This course provides students with the tools they need to excel in their courses. Trained tutors individually help students attain higher levels of comprehension and competency by providing supplemental instruction for pre-approved subjects. Workshops enhance student learning. The course is open-entry/open-exit.

0 Units
1 to 360 Lab hours

NBAS 010
Supervised Tutoring in Mathematics

Trained tutors will individually help students who need assistance in attaining comprehension and competency in mathematical learning skills. This course is designed to supplement the instruction in mathematics courses and other courses with mathematical content. This course is open-entry/ open-exit.

0 Units
1 to 360 Lab hours

NBAS 014
Review of Integrated Math I Part A

This course is a review of the first half of Integrated Math I. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the first semester of Integrated Math I, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may

involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Number and Quantity, Algebra, and portions of Functions.

0 Units
22 to 100 Lecture hours

NBAS 015
Review of Integrated Math I Part B

This course is a review of the second half of Integrated Math I. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the second semester of Integrated Math I, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Geometry, Statistics and Probability, and portions of Functions.

0 Units
22 to 100 Lecture hours

NBAS 016
Review of Integrated Math II Part A

This course is a review of the first half of Integrated Math II. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the first semester of Integrated Math II, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Algebra, portions of Functions, and portions of Number and Quantity.

0 Units
22 to 100 Lecture hours

NBAS 017
Review of Integrated Math II Part B

This course is a review of the second half of Integrated Math II. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the second semester of Integrated Math II, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from

a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Geometry, Statistics and Probability, portions of Number and Quantity, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBAS 018

Review of Integrated Math III Part A

This course is a review of the first half of Integrated Math III. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the first semester of Integrated Math III, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Algebra, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBAS 019

Review of Integrated Math III Part B

This course is a review of the second half of Integrated Math III. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the second semester of Integrated Math III, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Number and Quantity, Geometry, Statistics and Probability, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBAS 020

Review of Algebra I Part A

This course is a review of the first half of Algebra I. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the first semester of Algebra I, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers

the Common Core State Standards domains of Number and Quantity, Algebra, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBAS 021

Review of Algebra I Part B

This course is a review of the second half of Algebra I. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the second semester of Algebra I, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Geometry, Statistics and Probability, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBAS 022

Review of Geometry Part A

This course is a review of the first half of Geometry. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the first semester of Geometry, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of: portions of Congruence, portions of Similarity, Right Triangles, and Trigonometry, and portions of Modeling with Geometry.
0 Units
22 to 100 Lecture hours

NBAS 023

Review of Geometry Part B

This course is a review of the second half of Geometry. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the second semester of Geometry, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Congruence, portions of Similarity, Right Triangles, and Trigonometry, Circles,

portions of Expressing Geometric Properties with Equations, Geometric Measurement and Dimension, and Statistics and Probability.
0 Units
22 to 100 Lecture hours

NBAS 024

Review of Algebra II Part A

This course is a review of the first half of Algebra II. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the first semester of Algebra II, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Number and Quantity, Algebra, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBAS 025

Review of Algebra II Part B

This course is a review of the second half of Algebra II. It is mainly a self-paced, software-based independent study program which permits a high school student to retake the second semester of Algebra II, for the purpose of making up credit and/or improving their grade from a prior attempt at the course, but may involve individualized and/or small group instruction as needed. Students wishing to enroll in this course will need consent from a high school counselor and consent from a parent. The course covers the Common Core State Standards domains of Geometry, Statistics and Probability, and portions of Functions.
0 Units
22 to 100 Lecture hours

NBIZ 001

Introduction to Computers

This course is designed to enable efficient operation of the alphanumeric keyboard on a computer. Common keyboarding techniques will be applied to develop speed and accuracy. Students will create typed document files and learn editing/formatting functions on Microsoft® Word® and a variety of word processing programs in order to prepare school assignments, personal and essential business correspondences.
0 Units
24- Lecture hours

NBIZ 002**Keyboarding and Word Processing**

This course is designed to enable efficient operation of the alphanumeric keyboard on a computer. Common keyboarding techniques will be applied to develop speed and accuracy. Students will create typed document files and learn editing/formatting functions in order to prepare school assignments and personal and business correspondences.

0 Units**24 Lecture hours****NBIZ 003****Microsoft Word Essentials**

This course prepares students for independent and confident use of Microsoft Word. Students will create documents applying to a variety of editing features including the following: adjusting margins and tab settings; copying, pasting, moving texts; formatting layout; running the integrated grammar and spelling review; modifying header and footer areas; creating tables and graphs. Students will prepare a variety of documents for school and office environments, including creating a professional resume.

0 Units**24 - 48 Lecture hours****NBIZ 004****Microsoft Excel Essentials**

This course is an orientation to the primary functions of spreadsheets for data management using Microsoft® Excel®. Topics include creating cell data, formatting cells and worksheets, and applying formulas and functions. Students will learn how to analyze and organize data, present data visually by creating charts, and manage the worksheet and workbook environment.

0 Units**24 - 48 Lecture hours****NBIZ 005****Microsoft Outlook and Powerpoint**

In this course, students gain skills necessary for dynamic uses of Microsoft Outlook and Microsoft PowerPoint for personal, school, or work-related contexts. Students explore various features of email communication, digital files sharing, and calendar management in Outlook, and learn how to create animated electronic presentations using PowerPoint tools. Students practice by making a presentation with supporting visual slides.

0 Units**24 Lecture hours****NBIZ 006****Microsoft Access Essentials**

In this course, students learn to use Microsoft Access, a widely used database management system in business environments. Students learn design guidelines for developing database structures in order to customize tables, queries, forms, and reports for various business needs. Students learn to edit tables, design and establish query criteria, customize forms, and format reports for professional printouts.

0 Units**24 Lecture hours****NBIZ 020****Workforce Preparation: 21st Century Skills**

This course orients students to essential capacities for professional and collegial workplace performance: critical thinking, communication, collaboration, and cultural humility. Additionally, students gain practical guidance in resumé composition and job interview preparation.

0 Units**15 Lecture hours****NBIZ 038****Real Estate Practices (Formerly NVOC 038)**

This class is an introduction to the professional aspects of the real estate industry. The focus of the course is on the agency responsibilities of the salesperson including office management, listing and prospecting property, selling and marketing techniques, advertising, securing loans, and closing procedures. Students will also acquire general knowledge of other pertinent fields as they relate to real estate, such as finance, appraisal, escrow, and investing. This course is approved by the California Bureau of Real Estate (CalBRE) to fulfill education requirements for the California Real Estate Salesperson License and may be applied towards the California Real Estate Broker License requirements. Taken in sequence with NVOC 039, students earn the Certificate of Completion in Real Estate Practice and Finance approved by the California Community Colleges Chancellor's Office.

0 Units**48 Lecture hours****NBIZ 039****Real Estate Finance (Formerly NVOC 039)**

This course is designed to help the pre- and new licensee, the experienced real estate agent, the investor, and the lender gain a better understanding of the complex world of real estate finance. It covers all aspects of real estate financing from completing loan applications, navigating

the escrow process, to closing loans. The course details current lending policies, qualifying standards, and disclosure requirements. This course is approved by the California Bureau of Real Estate (CalBRE) to meet the elective education requirements for the California Real Estate Salesperson License and the California Real Estate Broker License. Taken in sequence with NBIZ 038, students earn the Certificate of Completion in Real Estate Practice and Finance approved by the California Community Colleges Chancellor's Office.

0 Units**48 Lecture hours****NBIZ 040****Real Estate Principles (Formerly NVOC 040)**

This is a foundational real estate course that covers the basic laws and principles of land and property transactions. Course topics include overview of property laws, land descriptions, titles, acquisition and transfer, liens and encumbrances, taxation, contract law, landlord and tenant laws, and real estate mathematics and finance. Students will become familiar with terminology and forms commonly used in everyday real estate transactions. This course is approved by the California Bureau of Real Estate (CalBRE) to fulfill education requirements for the California Real Estate Salesperson License. Taken in sequence with NBIZ 041, students earn the Certificate of Completion in Real Estate Principles and Appraisal approved by the California Community Colleges Chancellor's Office.

0 Units**48 Lecture hours****NBIZ 041****Real Estate Appraisal (Formerly NVOC 041)**

This course provides a comprehensive overview of real estate appraisal principles and procedures. Topics include land values and their characteristics, the process of appraising, capitalization theory, site analysis, and construction methods. Students gain guided practice in accrued depreciation analysis, income and expense analysis, and techniques in the income approach method of appraising. This course is approved by the California Bureau of Real Estate (CalBRE) to meet the elective education requirements for the California Real Estate Salesperson License and the California Real Estate Broker License. Taken in sequence with NBIZ 040, students earn the Certificate of Completion in Real Estate Principles and Appraisal approved

by the California Community Colleges Chancellor's Office.

0 Units

48 Lecture hours

NBIZ 050

California Property Taxation and Assessment

This course provides students with a fundamental knowledge of California's property tax system for assessing purposes. The course provides students with an overview of Proposition 13, who apply its provisions to various property assessment situations, including appraisals, changes in ownership, exemptions, and assessment appeals.

0 Units

24 Lecture hours

NCHS 001

Health and Fitness

This is an open-entry, open-exit course to develop and enhance a student's knowledge of the importance of healthy lifestyles and to further develop skills which will facilitate a personal fitness program. Student's will also participate in specific activities that develop an individual's level of physical fitness.

0 Units

1 to 54 Lab hours

NCHS 002

Beginning Jujitsu: Self Defense for Adults

This course is designed to teach the basic skills of self-defense. Students will be taught skills related to coordination, quick reflex response, how to build stamina, speed, and strength. They will learn all phases of punches, blocks, kicks, hand releases and breaks, two-step fighting, judo and jujitsu falls. Students will practice strategies of protecting themselves from attackers.

0 Units

48 Lecture hours

NCIT 002

U.S. Citizenship Preparation

This course is designed to assist eligible individuals in completing the steps required to become United States citizens. Students gain knowledge of United States history, government and institutions, community services and agencies, and the privileges and obligations of citizenship. The course prepares students with literacy skills necessary to pass the written test and provides listening and speaking practices for the oral interview. Students will receive guidance on completing appropriate application forms.

0 Units

45 Lecture hours

NCOA 001

Painting for Older Adults

This course offers the older adult an individual approach to painting and creative arts. Topics can include art appreciation and art history; awareness of line, color, shape and form; techniques in drawing and progression through color mixing and canvas painting. Creativity and general art knowledge will be taught in a friendly and relaxed environment allowing each artist to work at their own pace.

0 Units

16 to 32 Lecture hours

NCOA 002

Music Workshop for the Third Age

Courses for instrumental and vocal musical experiences. Included can be rehearsals and performances in cooperation with the Rio Hondo Chapter of Sweet Adelines; other local choral and/or singing groups; and instruction in learning to play a musical instrument.

0 Units

1 Lecture hours

1 Lab hours

NCOA 007

Chorus Singing for the Older Adult

This course introduces older adult students to a variety of choral music and explores its cultural and historical aspects. Students will gain knowledge of posture, vowel modification, elements of phrasing and harmony. Students will perform vocal exercises and practice breathing techniques appropriate for the older adult.

0 - Units

1 to 48 Lecture hours

NCOA 008

Computers Unlimited for Older Adults

This course is designed for the older adult who thinks he or she will never learn to use a computer. Students will build basic skills that will prepare them to write documents, send e-mail, use online banking or simply enjoy surfing the Internet. Mastery of the basic skills will let you grow from simple accomplishments to things you never dreamed possible. Our gentle, easy approach will show you the many ways that computers can be fun and interesting.

0 Units

8 to 20 Lecture hours

8 to 20 Lab hours

NCOA 010

Principles of Mind and Body Health for Older Adults: Flexibility and Balance

This course provides older adults with instruction and resources for cultivating mind and body health. Guided instruction in active and

passive yoga poses, stretching movement, and breathing exercises adapted for older adults is incorporated with introduction to the philosophy of Hatha Yoga. The course includes presentations and class discussions on current topics on nutrition, healthy aging, and safety factors.

0 Units

1 to 24 Lecture hours

NCOA 012

Principles of Mind and Body Health for Older Adults II: Strength and Balance

This course provides older adults with instruction and resources for cultivating mind and body health. Guided instruction in movements to maintain and increase muscle strength, physical fitness, coordination, and balance is combined with class discussions on current topics in nutrition, healthy aging, and mental health.

0 Units

1 to 24 Lecture hours

NCOA 013

Current Topics for Older Adults

This course presents older adults with various topics for discussion and class activities based on the student's individual interests and backgrounds. Older adults will explore international, national and local events and issues from a current and historical viewpoint.

0 Units

1 to 24 Lecture hours

NCOA 014

Tai Chi Chuan for Older Adults

This course introduces older adults to a Chinese health exercise which is neither vigorous nor strenuous. It is suitable for older adults who want to exercise to gain or maintain good health. It will strengthen the muscles and organs, relax the mind and body, improve blood circulation, and increase memory and concentration.

0 Units

1 to 24 Lecture hours

NCOA 015

Creative Writing for Older Adults

This course is for older adults and teaches both beginning and experienced writers how to create and shape autobiographies, fiction, non-fiction and poetry into readable and publishable forms. Participants will put their experiences on paper and analyze quality, selection and structure of written materials through group discussion and projects.

0 Units

1 to 24 Lecture hours

NESL 001**ESL Beginning I**

This course is suitable for the true beginner to the English language. This entry level course focuses on the acquisition of basic speaking, listening, reading, and writing skills to meet immediate social communication needs in an English-speaking environment. Successful completion of this course prepares students to enter NESL 015.

0 Units**30 to 60 Lecture hours****NESL 015****ESL Beginning II**

Prerequisite: NESL 001 or equivalent placement (CASAS Appraisal)

This course is designed to provide an introduction to English speaking, listening, reading, and writing skills enabling the student to satisfy routine demands in social settings. Students develop the ability to comprehend and respond to basic spoken English. Students practice reading and writing at the sentence level. If taken in sequence with NESL 001, successful completion of this course earns a Certificate of Competency in Foundational English as a Second Language and prepares students for entry into NESL 016.

0 Units**30 to 60 Lecture hours****NESL 016****ESL Intermediate I**

Prerequisite: NESL 015 or equivalent placement (CASAS Appraisal)

This course focuses on expanding students' listening and speaking skills in face-to-face conversations in social, academic, and work contexts. Students gain ability to read and interpret narrative passages on a variety of topics, and to write simple routine correspondence and short paragraphs. Upon successful completion of this course students are prepared to enter NESL 017.

0 Units**30 to 60 Lecture hours****NESL 017****ESL Intermediate II**

Prerequisite: NESL 016 or equivalent placement (CASAS Appraisal)

This course focuses on preparing English learners to communicate independently and effectively for a variety of purposes and audiences. Students practice engaging in extended conversations, reading for comprehension of authentic texts, and writing multiple paragraphs with good command of grammar conventions. If taken in sequence with NESL 016, successful completion of this course earns a Certificate of

Competency in Intermediate English as a Second Language and prepares students for entry into NESL 018.

0 Units**30 to 60 Lecture hours****NESL 018****ESL Advanced I**

Prerequisite: NESL 017 or equivalent placement (CASAS Appraisal)

This course stresses the refinement and expansion of language skills which enable students to use fluid-paced English to effectively meet social, academic, and workplace demands. Reading for comprehension focuses on factual extraction as well as interpretation using critical thinking skills. Progression of writing skills focuses on the introduction of the writing process and the construction of well-developed compositions. If taken in sequence with NESL 017, successful completion of this course earns a Certificate of Competency in Advanced English as a Second Language and prepares students for direct entry to Río Hondo College's Credit English Program.

0 Units**30 to 60 Lecture hours****NESL 019****ESL Advanced II**

Prerequisite: NESL 018 or equivalent placement

The College Preparation course is the highest Noncredit ESL level designed for students who wish to prepare for transition into various academic programs at the college level. This course reinforces and builds on students' English language skills to meet the academic expectations of college courses. Students are introduced to basic elements of an academic course: understanding the syllabus, note-taking, participating in discussion, interpreting written texts, composing essays, and making presentations. Students practice these academic skills in a supportive language-learning community. If taken in sequence with NESL 018, the successful completion of this course earns the Certificate of Competency in English for College Preparation and prepares students for direct entry to Río Hondo College's Credit English Program.

0 Units**30 - 60 Lecture hours****NESL 034****ESL Multi-Level I**

This course focuses on preparing students to use English to achieve tasks within a variety of real-life situations such as a doctor's office or a department store. Students are instructed to be able to listen, speak, read, and write in English in context-specific environments. This is an accelerated

version of NESL 035 that is designed for students with some knowledge of the English language.

0 Units**24 to 50 Lecture hours****NESL 035****ESL Multi-Level**

This course focuses on preparing students to use English to achieve tasks within a variety of real-life situations such as a doctor's office or a department store. Students are instructed to be able to listen, speak, read, and write in English in context-specific environments.

0 Units**24 to 90 Lecture hours****NESL 036****Family Literacy**

This course focuses on engendering reading and literacy as a fundamental component of a healthy, well-functioning family. The family-oriented assignments promote the seamless integration of reading across school and home boundaries.

0 Units**1 to 72 Lecture hours**

NFIR 015**Practical Experience in Fire Suppression (Formerly NVOC 015)**

This course is designed to provide fire technology students or those involved in a related fire science subject to expand on their knowledge in the major points of fire service. Topics include the traditions of the fire service, general development of a firefighter, ethical and moral standards, and other related issues pertaining to the fire service. Students will receive individualized instruction tailored to their personal plan of study.

0 Units**1 to 500 Lab hours**

NGBD 101**Green Building Basics & LEED**

The course offers an introduction to USGBC, green building principles and the fundamentals of the LEED Rating System. It includes topics on climate change and building impacts; motivators for green building; and integrative versus conventional approaches – and the associated benefits – to building design, construction and operations. This course is intended for those who are new to green building and looking to learn the basics of green building and LEED.

0 Units**20 Lecture hours**

NHAN 001**Art Workshop for the Handicapped**

Courses for cultural enrichment and awareness of many different forms of art. Emphasis is on therapeutic value.
0 - Units

1 to 18 Lecture hours

1 to 18 Lab hours

NHEC 002**Soap Making as an Art and a Business**

This course is designed for anyone wanting to expand their creative skills for personal satisfaction or as a business. Students will create different kinds of soaps such as glycerin or coconut soap. The use of molds, layering of colors, and adding herbs and fragrances will be discussed.

0 Units

1 to 54 Lecture hours

NHSL 030**Nursing Skills Lab**

This course complements the HS, ADN and VN lecture courses and is designed to provide an additional opportunity for students to practice skills covered in their co-requisite courses. These instructional activities are not available in the regular lecture/lab course and are not required for the grade in the co-requisite course.

0 Units

10 to 200 Lab hours

NHSN 030**Personal Care Aide
(Formerly NVOC 030)**

Corequisite: NHSN 031

Advisory: GED or High School Diploma

This course is designed to prepare students to assist elderly, disabled, and ill individuals living at home. This course will help students enhance their communication skills and knowledge of health environment and procedures for emergencies. Students will also learn to recognize physical, emotional, and developmental characteristics of individuals served; personal hygiene, safe transfer techniques, basic nutrition, and other personal care needs.

0 Units

70 Lecture hours

30 Lab hours

NHSN 031**First Aid and CPR****(Formerly NVOC 031)**

This course teaches skills with the AHA's research-proven practice-while-watching technique. The course is designed to teach students critical skills needed to respond to and manage an emergency until

emergency medical services arrives. Skills covered in this course include first aid; choking relief in adults, children, and infants; and what to do for sudden cardiac arrest in adults, children, and infants. This course is for anyone with limited or no medical training who needs a course completion card in CPR and AED use to meet job, regulatory, or other requirements.

0 Units

8 Lecture hours

NHSN 032**American Heart Association CPR BLS
(Formerly NVOC 032)**

This course is taught by AHA Instructors and meets the requirements for most nursing programs and clinical facilities. This course teaches both single-rescuer and team basic life support skills for application in both pre hospital and in-facility environments, with a focus on High-Quality CPR and team dynamics. Basic Life Support training reinforces healthcare professionals' understanding of the importance of early CPR and defibrillation, basic steps of performing CPR, relieving choking, and using an AED; and the role of each link in the Chain of Survival.

0 Units

4 Lecture hours

0 Lab hours

NHSN 040**Healthcare Careers Exploration**

This course is an orientation to non-clinical allied healthcare career pathways. Students gain exposure to the human services and administrative support dimensions of the healthcare field and learn about employment opportunities, educational requirements, and support resources available to enter the growing workforce. Students benefit from assessing their personal values and aptitudes for a career in healthcare while engaging general introductions to principles and practices foundational to healthcare careers.

0 Units

24 Lecture hours

NHSN 042**Medical Office Procedure and
Customer Service**

This course is designed to develop professional skills and attitudes needed in a medical business environment. Topics include effective communication with patients and medical office staff, effective time management, scheduling appointments, greeting patients, telephone and email business etiquette, and adherence to Health Insurance Portability and Accountability Act (HIPAA) guidelines.

0 Units

24 Lecture hours

NHSN 043**Medical Office Administration**

Advisory: NHSN 042

This course is a practicum to complement NHSN 042 - Medical Office Procedures and Customer Service. Students engage in patient interaction simulations, applying customer service skills, and using computers in a medical/clinical setting. Students gain hands-on experience in scheduling appointments, working with electronic medical records, and establishing a fee schedule, and receive orientation to the Microsoft Office suite, electronic billing software, electronic medical record software, and telephone, fax, and email systems.

0 Units

48 Lecture hours

NHSN 044**Medical Insurance Claims**

This course provides an overview of common health insurance terminology and selected aspects of private and government insurance coverage. The course introduces basic principles of diagnostic and outpatient procedural coding of physician/provider documentation. Students learn how to originate accurate and efficient reimbursement medical insurance claims for services provided.

0 Units

48 Lecture hours

NHSN 045**Health Care Industry Employment
Readiness**

This course equips students with skills and strategies for successful job placement in the health care industry. Course topics include interpersonal skills development, business communication, professional dress, and time management. Students receive practical guidance in resume and cover letter writing, interviewing, and navigating job search resources.

0 Units

24 Lecture hours

NHSN 050**Nurse Assistant Pre-Certification
(Formerly NVOC 050)**

Corequisite: NHSN 050L

This course is designed for students who have expressed an interest in an entry level nursing course. This course meets Title 22 regulations for taking care of the geriatric population in a long term care setting, utilizing skills in basic care, emergency care and communication. The Nurse Assistant Pre-Certification course consists of 72 hours of classroom instruction. This course prepares the student to take the California State Certification Exam to become a Certified Nurse Assistant (CNA). After obtaining the state certification, the student may find employment in the

acute care and /or long term care settings. The California Department of Public Health requires that students must be concurrently enrolled in both NHSN 050 and NHSN 05L, and pass both courses together, they cannot be taken individually.

0 - Units
72 - Lecture hours

NHSN 050L
Nurse Assistant Pre-Certification Lab
(Formerly NVOC 050L)

Corequisite: NHSN 050

This course is designed for students who have expressed an interest in an entry-level nursing course. This course meets Title 22 regulations for taking care of the geriatric population in a long-term care setting, utilizing skills in basic care, emergency care and communication. The Nurse Assistant Pre-Certification training course lab consists of 135 hours of supervised clinical practice in long-term facilities. This course prepares the student to take the California State Certification Exam to become a Certified Nurse Assistant (CNA). After obtaining the state certification, the student may find employment in the acute care and/or long-term care settings. The California Department of Public Health requires that students must be concurrently enrolled in both NHSN 050 and NHSN 050L, and pass both courses together. They cannot be taken individually.

0 Units
0 Lecture hours
135 Lab hours

NHSN 051
CNA Acute Care Training Course
(Formerly NVOC 051)

Prerequisite: NHSN 050 and NHSN 050L or California State Nurse Assistant Certification;

Corequisite: NHSN 051L

Advisory: ENGL 035 or ENLA 100 or appropriate assessment; READ 043 or appropriate assessment

This course is designed for students who are Certified Nurse Assistants that wish to learn the basic nursing skills and duties that apply to the acute care hospital setting. Specialized acute care areas, such as medical/surgical, orthopedics, pediatrics, and obstetrics, will be emphasized. The CNA Acute Care Training Course consists of 27 hours of lecture content. Topics covered include communication, patient observation skills, reporting and recording training, and reinforcement of Certified Nurse Assistant basic-care procedures. The Division of Health Science and Nursing requires that students be concurrently enrolled in both NHSN 051 and NHSN 051L, and successfully

complete both courses together. They cannot be taken individually.

0 Units
27 Lecture hours

NHSN 051L
CNA Acute Care Training Course Lab
(Formerly NVOC 051L)

Prerequisite: NHSN 050 and NHSN 050L or California State Nurse Assistant Certification;

Corequisite: NHSN 051

Advisory: ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

This course is designed for students who are Certified Nurse Assistants that wish to learn the basic nursing skills and duties in the acute care hospital setting with additional emphasis on the specialized acute care areas such as medical/surgical, orthopedics, pediatrics and obstetrics. The Certified Nurse Assistant Acute Care course lab consists of 81 hours of clinical practice alongside a clinical employed CNA in an acute care facility with faculty daily/weekly monitoring. This course includes communication, patient observation, reporting and recording training as well as reinforcement of Certified Nurse Assistant basic-care procedures. The Division of Health Science and Nursing requires that students be concurrently enrolled in both NHSN 051 and NHSN 051L, and successfully complete both courses together. They cannot be taken individually.

0 Units
81 Lab hours

NHSN 052
Home Health Aide Training Course
(Formerly NVOC 052)

Prerequisite: Nurse Assistant Pre-Certification Training Course/California State Certification;

Corequisite: NHSN 052L;

Advisory: ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

This course is designed for students who are Certified Nurse Assistants that wish to learn how to provide personal care in the home care setting for those who are unable to do it for themselves and/or promote the recovery, safety and comfort of the patient. Additional emphasis on rehabilitative nursing care, family relationships and the impact of long-term illness on the family as well as the client will be included. The Home Health Aide training course consists of 27 hours classroom instruction. This course meets title 22 regulations for Home Health Aides training programs. The California Department of Public Health requires that students must be concurrently enrolled in both NHSN

052 and NHSN 052L, and pass both courses together, they cannot be taken individually.

0 Units
27 Lecture hours

NHSN 052L
Home Health Aide Training Course
(Formerly NVOC 052L)

Prerequisite: Nurse Assistant Pre-Certification Training Course/California State Certification;

Corequisite: NHSN 052;

Advisory: ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

This course is designed for students who are Certified Nurse Assistants that wish to learn how to provide personal care in the home care setting for those who are unable to do it for themselves and/or promote the recovery, safety and comfort of the patient. Additional emphasis on rehabilitative nursing care, family relationships and the impact of long-term illness on the family as well as the client will be included. The Home Health Aide training course lab consists of 54 hours of supervised clinical practice in either the Acute Care or Skilled Nursing facility. This course meets the Title 22 regulations for Home Health Aides training programs. The California Department of Public Health requires that students must be concurrently enrolled in both NHSN 052 and NHSN 052L, and pass both courses together. They cannot be taken individually.

0 Units
54 Lab hours

NSCI 041
Basic Anatomy for Health Care

This course provides a basic overview of the structure and systems of the human body. Students are introduced to the body structures and functions of integumentary, musculoskeletal, nervous, sensory, endocrine, circulatory, lymphatic, respiratory, digestive, and genitourinary systems. The course covers the various ways by which human body structures maintain normal, healthy functions and includes an introduction to anatomical and physiological functions related to various disorders and diseases in each body system. This course does not satisfy the human anatomy requirement for credit.

0 Units
48- Lecture hours

NVOC 018
ACEDD-GIS Skills Development

This course complements the CIV, ARCH, ENGT, LAND and GIS lab and lecture courses and is designed to provide an additional opportunity

for students to practice concepts covered in the corequisite courses and enhance their board drafting and CADD skills for work place productivity. These instructional activities are not available in the regular lecture/lab course and are not required for the grade in the corequisite course.

0 Units

1 to 200 Lab hours

NVOC 021

OSHA 10 for General Industry

This course is intended for the individual who needs an overview and/or certification of OSHA safety standards for general Industry workplaces. This course will focus on OSHA's role in ensuring safe workplaces through hazard awareness and training while providing an overview of safety standard topics such as emergency action plans, fire protection and prevention, material handling, machine guarding, electrical safety, and walking-working surfaces. Upon successful completion of this course and meeting attendance requirements, the student will receive a Department of Labor 10-hour OSHA Training Card.

0 Units

14 – 18 Lecture hours

NVOC 027

OSHA 10 for Construction Trades

This course is intended for the individual who needs an overview and/or certification of OSHA safety standards for the construction workplace. This course will focus on hazard awareness while providing an overview of topics such as fire protection and prevention, material handling, hand and power tools, welding safety, electrical safety, and fall protection. Upon completion of this course and meeting attendance requirements, the student who completes the course will receive a 10-hour Department of Labor (DOL) OSHA Certification Card.

0 Units

14 – 18 Lecture hours

NVOC 0029

Effective Supervision Certificate Program

This course is designed for individuals promoted into supervisory positions. The class will assist employers who have promoted line employees with little or no formal supervision training, as well as those anticipating a career that includes supervising other individuals. Topics will focus on six areas comprised of basic supervisory skills and concepts. Students are provided with an overview of what is expected of an effective supervisor and what skills are required to successfully perform in that capacity. Real-life business situ-

ations are discussed and evaluated. Students take knowledge gained back to their respective work venues and conversely bring examples to the class for discussion.

0 Units

18 Lecture hours

NVOC 059

Introduction to Welding Processes

This is an introductory class designed to familiarize the student with several welding processes that are currently used in the welding and metal fabrication industry. This course offers an overview and basic introduction to the theory and practice of a variety of welding and metal cutting methods. This course will emphasize safety, theory, procedure, and practical skill development.

0 Units

1 to 18 Lecture hours

1 to 54 Lab hours

NVOC 060

Semi-Automatic Welding Processes

This course is intended for the student who wants to progress to an intermediate level of welding processes and further their skills in wire-fed, semi-automatic welding methods and techniques. This course emphasizes skills in gas metal arc welding (GMAW) and flux cored arc welding (FCAW). The course also focuses on safety, theory, characteristics and settings for power supplies and wire feeding units, electric current settings, electrode identification and selection, welding positions, and welding of ferrous and non-ferrous metals. Special emphasis will be placed on developing proficiency and speed for high volume production applications.

0 Units

36 Lecture hours

108 Lab hours

NVOC 061

Production Welding Techniques

This is an intermediate level course focused on welding techniques used in high-volume production manufacturing environments. Students gain proficiency using pulsed-arc & non-pulsed-arc gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW) processes on carbon steel, stainless steel, and aluminum materials. Correct use of welding fixtures, positioners, and other auxiliary equipment are covered. Emphasis is placed on using shop safety in addition to developing proper working procedures.

0 Units

36 Lecture hours

108 Lab hours

NVOC 062

Introduction to Fabrication Processes

This is a beginning level course designed to introduce students to various techniques, processes and technologies used in the Fabrication industry. This course will develop skills necessary for translating dimensional information from a shop drawing or blueprint to metallic materials used for production of finished parts and assemblies. Topics covered in this class will include basic blueprint reading, measurement and measuring tools, layout, metal cutting, drilling and tapping, and metal forming. Emphasis will be placed on shop safety and safe and proper use of equipment, tools and materials.

0 Units

1 to 18 Lecture hours

1 to 54 Lab hours

NVOC 063

Intermediate Fabrication Processes

This course is designed to broaden the students' skills and knowledge of metal fabrication techniques. This course will introduce students to basic hand tools and power tools commonly used in the metal fabrication industry. Topics covered in this class will include structural fabrication, tube bending, stair layout and construction, and fabrication of components from sheet metal. Emphasis will be placed on shop safety and on developing proper working procedures.

0 Units

1 to 18 Lecture hours

1 to 54 Lab hours

NVOC 069

Introduction to Gas Tungsten Arc Welding

Advisory: READ 043 or appropriate placement; WELD 040 or NVOC 059
This course introduces the principles and practices of gas tungsten arc welding (GTAW), including setup/use of GTAW equipment and safe use of tools and equipment. Instruction and practice is provided for gaining proficiency welding carbon steel, stainless steel, and aluminum weld joints in the flat and horizontal positions. Fundamentals of the GTAW process, correct consumables, equipment, and pre-weld preparation will be covered.

0 Units

36 Lecture hours

108 Lab hours

NVOC 070

Advanced Gas Tungsten Arc Welding

Advisory: READ 043 or appropriate placement; WELD 065 or NVOC 069
This course provides further advancement of knowledge and skills in gas tungsten arc welding (GTAW). Emphasis is placed on developing

proficiency in welding carbon steel, stainless steel, and aluminum weld joints in the vertical and overhead position. This course exposes students to using positioners, welding fixtures, and tooling commonly used in the workplace. Preparation for welding certification is covered.

0 Units

36 Lecture hours

108 Lab hours

NVOC 071

Basic Electric Arc Welding

Advisory: ENGL 035 or ENLA 100 or appropriate placement; READ 043 or appropriate placement

This course is intended for the student who wants to progress to a basic level of welding processes and further their skills in manual and semi-automatic electric arc welding methods and techniques. This course emphasizes skills in Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (GTAW). The course also focuses on safety, theory, characteristics and settings for power supplies and welding units, electric current settings, electrode identification and selection, welding positions, and welding of ferrous and non-ferrous metals. Special emphasis will be placed on developing proficiency and speed for high volume production applications.

0 Units

18 Lecture hours

54 Lab hours

NVOC 072

Manual Electric Arc Welding Processes

Advisory: READ 043 or appropriate placement; WELD 040 or NVOC 059

This course is intended for the student who wants to progress to an intermediate level of welding processes and further their skills in manual electric arc welding methods and techniques. This course emphasizes skills in shielded metal arc welding (SMAW) and gas tungsten arc welding (GTAW). The course also focuses on safety, theory, characteristics and settings for power supplies and welding units, electric current settings, electrode identification and selection, welding positions, and welding of ferrous and non-ferrous metals. Special emphasis will be placed on developing proficiency and speed for high volume production applications.

0 Units

36 Lecture hours

108 Lab hours

NVOC 075

Certification Welding I

Advisory: READ 043 or appropriate placement; WELD 055 or NVOC 072

This course is an advanced course offering specialized instruction necessary for passing the City of Los Angeles Department of Building & Safety (LADBS) certified welder performance examinations. Emphasis will be placed on building skills in shielded metal arc welding (SMAW), flux cored arc welding (FCAW), and gas metal arc welding (GMAW) as applicable to acquire LADBS certified welder classifications in structural steel, light gage steel, and structural aluminum. Safety, welding codes, welding procedures and techniques, inspection requirements, nondestructive testing, and destructive testing will be covered. This course may be repeated once for certification or licensure standards, only by permit from the division.

0 Units

36 Lecture hours

108 Lab hours

NVOC 080

Certification Welding II

Advisory: READ 043 or appropriate placement; WELD 055 or NVOC 072

This course is intended for the student who wants to progress to an advanced level of welding processes and certification. This course offers specialized training and instruction which are necessary to take and pass the written test portion of the City of Los Angeles Department of Building & Safety (LADBS) Certified Welder Examination. This course emphasizes specific skills in shielded metal arc welding (SMAW), flux cored arc welding (FCAW), and gas metal arc welding (GMAW) as it applies to certification in structural steel, light gage steel, and structural aluminum. The course also focuses on safety, welding codes, test preparation, procedures, and destructive testing. Special emphasis will be placed on developing proficiency in order to successfully pass the LADBS exam. This course may be repeated once for certification or licensure standards, only by permit from the division.

0 Units

36 Lecture hours

108 Lab hours

NVOC 138

Engineering Careers & Applications

This course is for all students interested in the career field of Engineering Design Drafting. Engineering Careers and Applications will explore the career opportunities and training requirements in the field of engineering and engineering technology. Topics will include the history of engineering, careers in engineering,

ethics and responsibilities of the engineer, communicating and problem solving.

0 Units

27 Lecture hours

36 Lab hours

NVOC 140

Civil Drafting Fundamentals

This course is for all students interested in the career field of Civil Design Drafting and Civil Engineering. The course is study of civil design drafting practices and the preparation of drawings used in the civil engineering field. Students will use Computer Aided Drafting (CADD) software to complete projects relating to interpretation of survey data, profiles and cross sections, land subdivision, site and grading plans, underground utilities and structures, concrete and structural detailing.

0 Units

36 Lecture hours

72 Lab hours

NVOC 150

AutoCAD for Basic CADD Applications

This course is for students preparing for high technology careers who need the skills necessary to function as an entry level CADD operator or to apply CADD to specific disciplines of mechanical and architectural design, manufacturing, illustration and engineering related documents. An overview of computer graphics and CADD (Computer Assisted Design and Drawing) utilizing the latest release of AutoCAD software will be provided. Students will produce 2D orthographic, isometric, and basic 3D models solutions of mechanical and architectural applications.

0 Units

54 Lecture hours

54 Lab hours

NVOC 170

MicroStation for Basic CADD Applications

This course is for students preparing for high technology careers who need the skills necessary to function as an entry level CADD operator or to apply CADD to specific disciplines of mechanical and architectural design, manufacturing, illustration and engineering related documents. An overview of computer graphics and CADD (Computer Assisted Design and Drawing) utilizing the latest release of MicroStation software will be provided. Students will produce 2D orthographic, isometric, and basic 3D models solutions of mechanical and architectural applications.

0 Units

54 Lecture hours

54 Lab hours

NVOC 200
Intermediate AutoCAD for Design and Production

This course is for students pursuing degrees or certificates in the Architecture and Engineering Design Drafting Program and for those who wish to enhance their AutoCAD skills for workplace productivity. The course is an intermediate application study in computer aided design, drafting, and graphics using the latest revisions of AutoCAD. Combined with previously learned technical drafting conventions and basic AutoCAD operational skills, students will use AutoCAD to produce detailed drawings that involve model-space and paper-space, 2D and 3D objects, block attributes and viewport scales. Emphasis will be placed on working with multiple drawing files using external files to create mechanical, architectural and civil projects.

0 Units
45 Lecture hours
54 Lab hours

NVOC 241
Civil Engineering Drafting & Design

This course is for all students interested in the career field of Civil Design Drafting and Civil Engineering. Civil Drafting and Design is an intermediate level class in which the practices and the preparation of drawings, pertaining to the civil engineering field, will be expanded to include the development of maps and drawings used for transportation, site development, grading and drainage and road alignment. The student will use Computer Aided Drafting (CADD) to complete the above mentioned projects. Other topics to be covered will include specifications, site details for utilities and underground piping, structural plans and integration of Geographic Information Systems (GIS).

0 Units
36 Lecture hours
72 Lab hours

NVOC 245
Civil Engineering Design & Modeling

This course is for all students interested in the career field of Civil Design Drafting and Civil Engineering. Civil Design & Modeling is an advanced level class which includes design analysis and the preparation of drawings used in the civil engineering field. The student will use civil engineering software, such as InRoads and Land Desktop to design, analyze and develop projects relating to transportation, site development, grading, drainage and road alignment and alternatives. Other topics to be covered are terrain modeling, surface editing, alignment editing, plan, profile, cross-sections, earth-

work computations and site planning design.

0 Units
36 Lecture hours
72 Lab hours

NVOC 250
Parametric Modeling 3D Applications for Mechanical Design

This course presents advanced applications of 2D and 3D Computer Aided Design Drafting (CADD) and an introduction to parametric modeling and rapid prototyping utilizing the latest releases of Autodesk Inventor series, SolidWorks, and other parametric modeling software to produce solutions for mechanical applications. Topics covered will benefit all students in areas of study related to Engineering, Drafting, Design and Computer Graphics. Course emphasis is given to CADD generated three dimensional graphics using wire frame, surface modeling, and parametric solids. This course may be taken once for credit towards the major and repeated 2 times to enhance student skills and proficiency levels.

0 Units
54 Lecture hours
54 Lab hours

NVOC 260
Advanced Architecture Using Revit and 3D Software

This course is for students pursuing an advanced study of BIM (Building Information Modeling) applications as they relate to architecture and the AEC industry (Architecture, Engineering, Construction). Utilizing the latest releases of 3D design software such as Revit and AutoCAD Architecture and previously learned technical and architectural drafting conventions, students will produce two and three dimensional BIM generated architectural drawings and 3D virtual models. This course benefits all students studying Architecture, Civil, Engineering of all types, Drafting, Design and Computer Graphics. High technology skills which are necessary to function as a designer or CADD Drafter are emphasized.

0 Units
54 Lecture hours
54 Lab hours

NVOC 261
Revit for Advanced BIM Architectural, Structural and MEP Applications

Advanced BIM (Building Information Modeling) applications extends the fundamentals of the Arch 260 class to include Structural, Mechanical, Electrical and Plumbing extensions of the Autodesk Revit Building software. Students will work on both group and individual projects to create and present three-dimensional represen-

tation of architectural solutions. Students will also learn the basic process and workflow in creation of Revit Families for use in building models.

0 Units
54 Lecture hours
54 Lab hours

NVOC 265
Pressure Piping Design

This course is for those students with CAD experience who are interested in the career field of pressure piping design engineering. This course presents the preparation of engineering detail drawings of piping systems for commercial, utilities and industrial plants. Included is information and work dealing with the location, installation, operation, and maintenance of pumps, steam turbines, compressors, tanks, heaters, coolers, cooling towers, condenser, reactors, boilers, chillers, heat exchangers and special equipment.

0 Units
36 Lecture hours
72 Lab hours

NVOC 266
Pressure Piping Applications

This course is for all students with a basic piping design understanding interested in the career field of pressure piping design engineering. This course presents the advanced preparation of engineering detail drawings of piping systems for commercial, utilities and industrial plants. Included is advanced information and layout work dealing with the location, installation, operation of pumps, steam turbines, compressors, vertical vessels, horizontal vessels, tanks, heaters, coolers, cooling towers, condenser, reactors, boilers, chillers, heat exchangers and special equipment.

0 Units
36 Lecture hours
72 Lab hours

NVOC 270
SolidWorks for 3D Modeling and Prototype Applications

This course presents an intensive study in 3D computer graphics and CADD (Computer Assisted Design and Drafting) utilizing the latest release of SolidWorks Software. This course benefits all students in areas of study related to Engineering, Drafting, Design and Computer Graphics. Students will produce three dimensional parametric computer generated virtual models incorporating mechanical design refinements. The course emphasizes high technology skills which are necessary to function as a design professional to apply 3D design graphics technology to specific disciplines of mechanical engineering, machine drafting and

design, manufacturing, animation, modeling and illustration. Students will be introduced to a variety of means to directly produce prototype models from CADD generated solid geometry.

0 Units

54 Lecture hours

54 Lab hours

NVOC 280

Advanced MicroStation for CADD & BIM Applications

This course is for students pursuing an advanced study in MicroStation 3D parametric CADD (Computer Assisted Design and Drafting) and the BIM (Building Information Modeling) approach to building design using Bentley Architecture. Students will apply previously learned drafting conventions to produce two and three dimensional CADD and BIM generated mechanical and architectural drawings and virtual design models. This course benefits all students studying Architecture, Civil, Engineering of all types, Drafting, Design and Computer Graphics. High technology skills which are necessary to function as a designer or CADD Drafter are emphasized.

0 Units

54 Lecture hours

54 Lab hours

NVOC 300

Refinery and Petroleum Safety

Overview

Prerequisite: State Indentured Carpenter Union Apprentice

This course will provide recognized credentials for workers in the refinery and petroleum industry. The training will emphasize Cal-OSHA safety measures including toxicology, hazard communication, and confined space work. Human performance methodologies will be applied to trade related hazards specific to this industry. An in depth discussion and overview of the petroleum and refining process will be conducted.

0 Units

20 Lecture hours

NVOC 1011

Orientation/Safety

This course is designed to meet the needs of Indentured Apprentices with the State of California who are interested in the general trade safety within the carpentry industry. Course topics will include: introduction to the carpenter's apprentice program, hand tool safety, power tool safety, math, beginning blueprint reading and layouts, trade history and job-site safety.

0 Units

20 Lecture hours

20 Lab hours

NVOC 1012

Health/Safety

This course is designed to meet the needs of Indentured Apprentices with the State of California who are interested in the general trade safety field within the carpentry industry. Course topics will include: Health and Safety Certifications, job safety, fall protection, powder actuated tools, confined space entry, scaffold training, rigging training, aerial lift training, and OSHA training. Certification can be earned in forklift, scaffold, American Red Cross/CPR and Ramset/ Redhead low velocity powder actuated tools.

0 Units

112 Lecture hours

112 Lab hours