



Goals and Competencies by Discipline/Program Fall 2007

Tulsa Community College
Office of Planning and Institutional Research
Paul B. Johnson
6/19/2008

Discipline or Program (pg. #)

click on a link to jump to that section of the document

Accounting Assistant (11)
Accounting Associate (12)
Art (38)
Aviation Sciences Technology (56)
Biology (58)
Business (14)
Chemistry (58)
Child Development (38)
Civil Engineering Technology (58)
Computer Information Systems (18)
Dental Assisting (1)
Dental Hygiene (1)
Developmental Studies in Communication (36/46)
Drafting and Design Engineering Technology (59)
Economics (25)
Electronics Technology (59)
Emergency Medical Technology (46)
Engineering (61)
English (36/46)
English as a Second Language (46)
Fire and Emergency Services Technology (46)
Geography (47/61)
Geology (61)
Geriatric Technician (52)
Graphics & Imaging Technology (25)
Health Care Administration (2)
Health Information Technology (3)
History (47)
Horticulture Technology (62)
Human Resources (26)
Human Services (47)
Humanities (48)
Interior Design (27)
International Business (27)
International Languages (36/48)
International Studies (49)
Interpreter Education (49)
Journalism & Mass Communications (37)
Law Enforcement (50)
Legal Assistant (28)
Management (29)
Manufacturing Engineering Technology (63)
Marketing / E-business (32)
Mathematics (63)
Medical Assistant (5)
Medical Laboratory/Phlebotomy Technology (6)
Music (51/54)
Numerical Control/Machinist Technology (63)
Nursing (53)
Occupational Therapy Assistant (7)
Patient Care Technician (53)
Pharmacy Technology (8)
Philosophy (51)
Physical Education (64)
Physical Therapist Assistant (9)
Physics / Physical Science (65)
Political Science (52)
Psychology (53)
Purchasing & Materials Management (32)
Quality Control Technology (65)
Radiography (9)
Religious Studies (52)
Respiratory Care (10)
Sociology (52)
Speech (38/52)
Stage Production Technology (54)
Surgical Technology (11)
Surveying Technology (65)
Telecommunications Technology (34)
Theatre (56)
Transportation Management (35)
Veterinary Technology (66)

2007 Goals and Competencies by Discipline/Program

Division Dsc/Pgm Option # Competencies

ALLH

Dental Assisting

- 1 Describe proper procedures for safety and hazard management. Label the structures of the head and neck.
- 2 Describe and explain the anatomy and morphology of teeth.
- 3 Explain and demonstrate preventative dentistry and nutrition.
- 4 Evaluate the connection between disease transmission and pathology.
- 5 Perform quality cleanliness, disinfection and sterilization procedures in the process of infection control.
- 6 Produce custom trays and elastometric impressions.
- 7 Fabricate alginate impressions and study casts.
- 8 Perform dental examinations.
- 9 Demonstrate oral evacuation and instrument transfer using hand and rotary dental instruments.
- 10 Assist in surgical and restorative procedures including the usage of dental materials.
- 11 Demonstrate proficiency in the use of rubber dam materials.
- 12 Prepare amalgam materials for restorations.
- 13 Utilize dental cements.
- 14 Describe crown and bridge procedures.
- 15 Define cosmetic dentistry.
- 16 Position patients for radiographic procedures, dental examinations and operative procedures.
- 17 Expose, process and mount dental radiographs using correct radiation safety measures.
- 18 Explain periodontic, endodontic, orthodontic, and prosthodontic procedures.
- 19 Define pediatric dentistry.
- 20 Respond to emergencies in the dental office.
- 21 Comprehend the utilization of pharmacology and pain control in dental care.
- 22 Demonstrate knowledge of front office procedures, including answering the phone, scheduling patients, filing charts and processing dental insurance claims.
- 23 Display good oral and written communication skills with the community, patients and the dental office staff.
- 24 Practice productive time management skills in the deliverance of patient care and office procedures.
- 25 Participate in community dental care education.

Dental Hygiene

COMMUNITY INVOLVEMENT

- 1 Provide oral health services in a variety of settings.
- 2 Assess, plan, implement, and evaluate community-based oral health programs.

ETHICS, PROFESSIONALISM AND COMMUNICATION

- 1 Apply a professional code of ethics as outlined by the Principles of Ethics of the American Dental Hygienists' Association.
- 2 Adhere to state and federal laws, recommendations and regulations in the provision of dental hygiene care.
- 3 Assume responsibility and accountability for dental hygiene actions and services, according to protocol.

4 Communicate effectively using verbal, nonverbal, written and electronic communication skills.

GENERAL

1 Intra/extraoral radiographs

2 Dietary analysis

3 Patient/parent counseling on oral self care for disease prevention, health maintenance, improvement of oral tissue health, appearance

4 Comprehensive infection control practices

5 Instrument sharpening

HEALTH PROMOTION AND DISEASE PREVENTION

1 Promote the values of oral and general health and wellness.

2 Evaluate factors that can be used to promote patient adherence to disease prevention and / or health maintenance strategies.

3 Identify individual and population risk factors for oral disease.

LABORATORY EXERCISES

1 Remove overhangs from amalgam and composite restorations

2 Prepare, place and remove periodontal packs

3 Place and carve amalgam restorations

4 Place interim restorations

5 Place and remove rubber dam

6 Perform soft tissue curettage

7 Remove sutures

8 Place or remove gingival retraction material

9 Tobacco use cessation counseling

10 Place controlled release agents

11 Implant maintenance

12 Sofscale

13 Impressions and preparation of study models

PROFESSIONAL GROWTH AND DEVELOPMENT

1 Apply self-assessment skills that prepare them for lifelong learning.

2 Evaluate current scientific literature.

3 Identify the role of the dental hygienist within health-care, such as industry, education, research, and public health.

Health Care Administration

ASSOCIATE DEGREE, GENERAL

1 Apply knowledge and skills necessary for immediate employment in a variety of positions in the health care administrative field.

2 Understand implications of social, political, legal, economic, competitive and technical environment variable on health care administration.

3 Know where to locate health care administration information and statistics.

4 Understand the concepts of planning, organizing, developing and controlling health care program quality and cost.

- 5 Understand and be able to use techniques to develop business plans and forecasts in relation to health care services offered to the community.
- 6 Use general education knowledge to understand how the environment influences health care administration plans and operations.
- 7 Identify current problems of the aggregate economy and understand how it influences the delivery and cost of health care services.
- 8 Understand the basic principles of three branches of national government and how the actions of these bodies influence the quality and delivery of health care services.
- 9 Understand the need for addressing continual change and how education must address upgrading human skill, knowledge and abilities to meet the need for health care organizational survival.

ASSOCIATE DEGREE, SAINT FRANCIS OPTION

- 1 Apply knowledge and skills necessary for immediate employment in a variety of jobs in the health care field.
- 2 Apply skill, knowledge and abilities from a broad academic background and intensive specialized training to health facility program requirements.
- 3 Demonstrate potential for growth in health care administrative jobs in health care organizations.
- 4 Understand the implications of social, political, legal, economic, competitive and technical environmental variables on health care administration.
- 5 Communicate effectively through verbal and written communications methods.
- 6 Understand fundamentals of marketing health care services: risk management and legal issues as they relate to the health care field.
- 7 Know where and how to research health care administration information and statistics.
- 8 Understand techniques for managing human, financial, and material resources in health care facilities.
- 9 Understand the basic principles of health care finance and reimbursement for services.
- 10 Understand the concepts of planning, organizing, developing, and controlling health care program quality and cost.
- 11 Understand and be able to use techniques to develop business plans and forecasts in relation to health care services offered to the community.
- 12 Demonstrate specialized business knowledge in select areas of health care administration.
- 13 Use general education knowledge to understand how the environment influences health care administration plans and operations.
- 14 Identify current problems of the aggregate economy and understand how it influences the delivery and cost of health care services.
- 15 Explore direct application of psychological principles to human-relations problems involving patients, families, visitors, and the general public.
- 16 Understand the basic principles of three branches of national government and how the actions of these bodies influence the quality and delivery of health care services.
- 17 Understand the need for addressing continual change and how education must address upgrading human skill, knowledge, and abilities to meet the need for health care organizational survival.

Health Information Technology

ASSOCIATE DEGREE

- 1 Apply existing policies for departmental functions.
- 2 Follow existing procedures for departmental functions.
- 3 Maintain work flow in area of responsibility within the data collection and processing system.
- 4 Follow work flow within the department to identify gaps and overlaps.
- 5 Revise existing work flow in area of responsibility within the data collection and processing system.

Division Dsc/Pgm Option # Competencies

- 6 Maintain quantity and quality of departmental work using established standards.
- 7 Perform quality improvement studies for health information management services.
- 8 Apply prospective payment system regulations.
- 9 Justify need for new equipment to management.
- 10 Apply existing policies and procedures for control, use and release of health information.
- 11 Follow specific procedures to ensure that confidentiality of health information is maintained.
- 12 Follow procedures to maintain security of computerized information.
- 13 Follow procedures of handling authorizations requesting health information release to assure validity.
- 14 Respond to request for health information.
- 15 Select appropriate information for release.
- 16 Follow existing procedures for transmittal of health information to and from other health care facilities upon transfer of patient.
- 17 Follow existing procedures for reporting health information as required by applicable legal, accrediting, licensing, and certifying regulations.
- 18 Follow existing procedures for preparation and use of health information in legal proceedings.
- 19 Write job descriptions in your area of responsibility.
- 20 Revise and update job descriptions as needed.
- 21 Apply existing healthcare facility and/or departmental human resource policies.
- 22 Plan self development/continuing education activities. .
- 23 Apply existing policies for collecting and processing health information.
- 24 Follow existing procedures for collecting and processing health information.
- 25 Follow existing procedures for manual or automated issuing of patient I. D. numbers.
- 26 Input data into computerized health information system.
- 27 Apply existing policies for retention of health information.
- 28 Evaluate primary health records to determine if they meet institutional needs.
- 29 Review secondary records to determine if they meet institutional needs.
- 30 Carry out concurrent medical record review activities.
- 31 Follow flow of patient care data within institution to assure receipt in the medical record department.
- 32 Follow procedures to compile primary health records.
- 33 Apply existing policies and procedures for quantitative analysis of health records.
- 34 Monitor accuracy of quantitative analysis of health records.
- 35 Follow existing procedures to ensure timely completion of health records.
- 36 Report problems with forms usage.
- 37 Maintain manual, locator file, sign out system or automated incomplete record control system.
- 38 Prepare report on physician's incomplete records for designated medical and administrative staff.
- 39 Maintain existing manual or automated filing systems for active and inactive primary records.
- 40 Supervise filing and maintenance of active and inactive primary records.
- 41 Maintain existing manual or automated filing system for indexes, other secondary records, and retrieval of health information.
- 42 Apply existing policies and procedures for retrieval of health information.

- 43 Follow existing procedures for retention and/or destruction of health records.
- 44 Follow existing control procedures to assure accuracy, consistency & completeness of statistical data.
- 45 Abstract health records for collection and processing of statistical data.
- 46 Abstract data from health records for research projects, special studies and educational programs.
- 47 Follow institution's policies and procedures for quality improvement.
- 48 Retrieve information for institution's quality assessment program.
- 49 Retrieve information for patient care evaluation studies.
- 50 Follow departmental coding policies and procedures.
- 51 Follow existing procedures for coding and reporting diagnosis and procedures.
- 52 Code diagnoses, procedures and symptoms for data collection and processing.
- 53 Follow existing control procedures to assure accuracy and completeness of coded information.
- 54 Follow Federal regulations and AHIMA guidelines for sequencing of diagnoses.
- 55 Apply definitions and guidelines to determine the principal diagnoses and principal procedure.
- 56 Perform DRG assignment utilizing automated grouper or decision trees.
- 57 Audit health data collection and processing activities (e.g., coding, indexing and statistics).
- 58 Participate in the development, revision or application of a departmental compliance plan

CERTIFICATE OF ACHIEVEMENT, CODING & REIMBURSEMENT SPECIALI

- 1 Review documentation in the patient care record to identify and/or confirm all reportable diagnoses and procedures in accordance with reporting guidelines.
- 2 Assign diagnostic and procedural codes in accordance with ICD-9-CM coding guidelines to assure totality of codes, accuracy of codes, and proper sequencing.
- 3 Assign procedural codes in accordance with CPT coding guidelines.
- 4 Apply definitions and guidelines to determine the principal diagnosis and principal procedure.
- 5 Apply prospective payment guidelines to legitimately optimize facility reimbursement.
- 6 Perform DRG assignment utilizing an automated grouper or manually by decision trees.
- 7 Apply coding guidelines as appropriate to a variety of health care settings, including but not limited to inpatient, ambulatory care, long term care facility, rehabilitation facility, and physician's office.
- 8 Follow departmental coding policies and procedures.
- 9 Develop procedures to monitor the quality of abstracting and coding.
- 10 Follow established guidelines related to coding as outlined in departmental compliance plan.
- 11 Develop or arrange for continuing education addressing coding issues.
- 12 Abstract health records for department indices/databases.
- 13 Retrieve patient data from departmental databases.
- 14 Perform quantitative analysis of health records.
- 15 Follow departmental procedures for maintaining a manual or automated filing, retrieval, and record control system.
- 16 Follow policies and procedures to ensure that confidentiality of health information is maintained.
- 17 Follow policies and procedures to maintain security of computerized information.

Medical Assistant

- 1 To perform front office duties including scheduling and receiving patients, obtaining patient's data, maintaining medical records, medical transcription, handling telephone calls, correspondence, reports and manuscripts, coding, and assuming responsibility for office management, insurance, office accounts, fees, and collections.
- 2 Perform all clinical duties as required by the physician including preparing the patient for examination, obtaining vital signs, taking medical histories, assisting with examination and treatments, performing routine office laboratory procedures and electrocardiograms, sterilizing instruments and equipment for office procedures and instructing patients in preparation for x-ray and laboratory procedures.
- 3 Perform duties accurately by reaching the standards set in the classroom laboratory and medical office.
- 4 Recognize legal responsibilities of the Medical Assistant in the performance of his/her professional duties.
- 5 Define professional liability in medicine.
- 6 Work in an office to fulfill role as a health care team member.
- 7 Recognize that continuing education is an on-going process.
- 8 Affiliate with the local American Association of Medical Assistants to upgrade their skills.
- 9 To sit for the Certified Medical Assistants examination.

Medical Laboratory/Phlebotomy Technology

ASSOCIATE DEGREE

- 1 Perform standard urinalysis procedures including physical, chemical, and microscopic examination and evaluation of urine manual and semi-automated equipment.
- 2 Operate manual and/or automated equipment in Hematology necessary to perform white cell/red cell/platelet counts, hemoglobins, differentials, and special tests as needed.
- 3 Understand and test for abnormal coagulation with manual and/or automated equipment.
- 4 Perform Immunohematology procedures including ABO and Rh typing, antibody screening, and cross matching of blood. Perform Immunoserology procedures by acceptable methods as determined by the laboratory setting.
- 5 Isolate and identify pathological organisms in microbiology by manual and automated methods and test for sensitivity to specific drugs.
- 6 Determine the concentration of clinically significant compounds in clinical chemistry using manual and automated procedures.
- 7 Maintain laboratory equipment by using quality control and preventive maintenance techniques.
- 8 Function completely in all the above areas with a minimum of supervision.
- 9 Perform phlebotomy procedures in a laboratory setting.
- 10 Have an appreciation for the need to participate in continuing education and professional organizations in order to keep updated in their field.
- 11 Demonstrate college entry level in reading, writing, and basic mathematics skills.
- 12 Understand and be able to apply a knowledge of history of the United States.
- 13 Understand and be able to apply a knowledge of the study of American Federal Government.
- 14 Apply psychological principles to human relation problems.
- 15 Demonstrate general knowledge of anatomy and physiology of the human body and how it relates to medical technology.
- 16 Demonstrate general knowledge as to the diversity of microorganisms and their significance to man.
- 17 Understand and be able to apply a general knowledge about fundamental laws and theories dealing with chemical reactions, interactions and properties of matter.
- 18 Be proficient in the area of safety.
- 19 Obtain quality type specimens.

20 Know the area of patient confidentiality.

21 Will be proficient in written communication skills.

CERTIFICATE OF ACHIEVEMENT

1 Obtain microsamples with consistent satisfactory achievement.

2 Obtain blood samples by venipuncture with consistent satisfactory achievement.

3 Describe venipuncture and microsample equipment and the indication for use.

4 Discuss the criteria for accurate patient identification.

5 Demonstrate an understanding of the importance of safety practices by compliance with safety policies.

6 Demonstrate an understanding of professional ethics by adhering to the concept of confidentiality and honesty in all areas of work.

7 Discuss limitations in site selection of edematous sites, previously punctured sites and patient's current physical condition.

8 Explain labeling and handling procedures following venipuncture and microsample collection.

9 Discuss methods for achieving hemostasis for venipuncture and microsampling.

10 Explain the procedure for cleansing the puncture site.

11 Identify the uses of color coded Vacutainer tubes.

12 Identify variables in the microsample and venipuncture procedure, which can affect test results.

13 Discuss procedures of obtaining blood samples in various laboratory departments (blood bank, microbiology, coagulation, etc.).

14 Discuss procedures for obtaining blood samples for various hospital departments (nursery, burn unit, pediatrics, oncology, etc.).

15 Discuss the protocol of various situations, i.e. (STAT, patient refuses to have blood drawn, unable to obtain specimen, Doctor is with patient).

16 Be proficient in the area safety.

17 Obtain quality type specimens.

18 Know the area of patient confidentiality.

19 Have knowledge of good telephone skills.

Occupational Therapy Assistant

1 Demonstrate college level reading and writing skills.

2 Understand and apply a knowledge of American Federal government.

3 Understand and apply a knowledge of American history.

4 Demonstrate a general knowledge of the anatomy and physiology of the human body and apply it in relationship to occupational therapy.

5 Appropriately use sources available for collecting evaluation data relevant to the client.

6 Select information from data sources that are relevant to the needs of the clients.

7 Elicit pertinent data from interviews and observation.

8 Correctly administer assigned evaluation procedures to obtain information relevant to client performance.

9 Develop treatment programs based on long and short-term goals.

10 Carry out programs that reflect the identified goals of individuals or groups of clients.

11 Effectively give instructions and select media and techniques in implementing programs.

Division Dsc/Pgm Option # Competencies

- 12 Use the techniques of group process to achieve group goals when working with a group.
- 13 Identify and report the need for program changes. Consider each client's needs and background when initiating and establishing a relationship.
- 14 Attend to safety needs of client and work setting. Respond, in a therapeutic manner, to specific manifestations of client behavior.
- 15 Contribute effectively to the smooth delivery of services by participating in appropriate departmental maintenance and oversight tasks and serving on relevant committees.
- 16 Understand and apply general knowledge of legal issues and trends, which impact client's lives and service delivery.
- 17 Appropriately orient client, family and relevant others to the nature and purpose of occupational therapy.
- 18 Communicate with supervisor to facilitate implementation of treatment goals.
- 19 Communicate with relevant others to facilitate collaborative implementation of overall treatment goals.
- 20 Maintain accurate written records and reports, and appropriately distinguish between subjective and objective data.
- 21 Budget time for preparation, cleanup or review, in addition to carrying out treatment programs.
- 22 Maintain supplies, equipment, and treatment area in good order.
- 23 Identify and take advantage of opportunities to learn new techniques or to refine those already known.
- 24 Identify and take advantage of opportunities to learn new techniques or to refine those already known.
- 25 Modify behavior in response to supervisory feedback.
- 26 Respect the client's rights to confidentiality, privacy, and choice.
- 27 Handle personal and professional problems so that they do not interfere with the performance of duties.

Pharmacy Technology

- 1 Explain the duties of the pharmacist and the pharmacy technician including department layouts and work areas.
- 2 Demonstrate professionalism and good ethical practice.
- 3 Describe proper procedures for security, safety and hazard management.
- 4 Demonstrate computer skills in organizing and processing data and charging for services.
- 5 Assist in processing of a variety of health insurance forms.
- 6 Develop patient prescription profiles.
- 7 Display good written and oral communications with the community, patients and other pharmacy staff.
- 8 Practice quality customer service and relations.
- 9 Explain the pharmacy laws and rules that apply to the role of a pharmacy technician.
- 10 Perform quality cleanliness, disinfection and sterilization procedures in process of infection control.
- 11 Demonstrate the utilization of correct medical terms, abbreviations, and pharmaceutical vocabulary.
- 12 Interpret pharmaceutical orders using the apothecary, metric and household measurement system.
- 13 Transcribe physician orders to a pharmacy profile.
- 14 Prepare, package, and distribute medications, devices and equipment.
- 15 Prepare inventory and order supplies.
- 16 Receive, check and store incoming supplies.
- 17 Prepare and add drugs or nutrients to intravenous solutions.

- 18 Demonstrate good judgement, accuracy in job tasks and attention to detail.
- 19 Practice productive time management skills in the deliverance of job tasks.
- 20 Respond to emergencies in the pharmacy work area.
- 21 Participate in educating patients in the utilization of medical devices and equipment.

Physical Therapist Assistant

- 1 Demonstrate college level reading and writing skills.
- 2 Understand and apply a knowledge of United States history.
- 3 Understand and be able to apply a knowledge of the study of American Federal government.
- 4 Demonstrate a general knowledge of the anatomy and physiology of the human body and how it relates to the practice of physical therapy.
- 5 Appropriately prepare patients, treatment area, and equipment for designated treatment.
- 6 Competently treat patients, utilizing exercise, physical agents, assistive devices and other treatment procedures and equipment to maintain/restore physical function, promote healing, relieve pain, and improve functional independence.
- 7 Instruct patients, families, and other health workers to perform selected treatment procedures and functional activities.
- 8 Assist the registered physical therapist in conducting complex treatment activities.
- 9 Perform/record basic measurement procedures, and record results of tests performed by the Registered Physical Therapist.
- 10 Recognize and appropriately react to physical/psychosocial distress of patient or patient's family.
- 11 Apply psychological principles to human relation problems with special emphasis on group dynamics, interpersonal communications and decision making.
- 12 Communicate effectively (verbally and nonverbally) with the supervising Registered Physical therapist, patients, and their families, and other members of the health care team through assigned elements of documentation.
- 13 Participate in selected aspects of physical therapy service planning.
- 14 Utilize available resources for improvement of knowledge and skill.
- 15 Utilize and further develop sound judgement skills, which enhance quality patient care.
- 16 Market themselves in non-traditional work settings.

Radiography

- 1 Exhibit a proficiency in routine office and filing procedures of a radiology department in order to maintain proper patient records.
- 2 Operate automatic developing equipment, process radiographs, and maintain quality control of automatic processing.
- 3 Demonstrate a professional appearance of themselves and their radiology department and demonstrate an ethical relationship with all personnel.
- 4 Select and operate the proper equipment and accessories to provide the patient with the best possible radiographic examination.
- 5 Scientifically select the proper technical factors to produce the highest quality radiographs with the lowest possible radiation exposure to the patient.

Division Dsc/Pgm Option # Competencies

- 6 Transport and position patients for all routine radiographic procedures, including portables, surgery and selected special procedures, while maintaining the highest standard of radiation protection for the patient and the technologist.
- 7 Assist the physician in administering contrast media and other common medications used in radiography.
- 8 Assist in medical emergency situations as necessary.
- 9 Practice proper sterile techniques and isolation procedures to prevent contamination and promote disease control for the patients and all other personnel.
- 10 Perform in all areas of the radiology department with full responsibility in the performance of all routine and selected special procedures.
- 11 Assist in the instruction and evaluation of future technologists.
- 12 Be responsible for other duties as delegated by their supervisor or physicians.
- 13 Demonstrate a basic knowledge of CT and MRI.
- 14 Demonstrate college level reading and writing skills.
- 15 Understand and be able to apply a knowledge of the history of the United States.
- 16 Understand and be able to apply a knowledge of the study of American Federal Government.
- 17 Apply psychological principles to human relation problems with special emphasis on group dynamics, interpersonal communications and decision making.
- 18 Demonstrate general knowledge of anatomy/physiology of human body and how it relates to radiography.
- 19 Possess an understanding and proper usage of "Universal Precautions" in dealing with bloodborne pathogens.
- 20 Students will possess a basic knowledge of and use of digital filmless radiography.

Respiratory Care

- 1 Cleaning and sterilization of equipment
- 2 Aerosol therapies
- 3 IPPB therapies
- 4 Incentive spirometry
- 5 Chest physiotherapy
- 6 Oxygen administration
- 7 Airway maintenance with tracheal suctioning
- 8 Mechanical ventilation with physician conference
- 9 Clinically monitor patient vital signs and intervention determinations
- 10 Drawing blood gases
- 11 Making blood gases determinations
- 12 Interpretation of blood gasses
- 13 Bedside simple spirometry
- 14 Pulmonary function analysis
- 15 Pulmonary rehabilitation
- 16 Pulmonary homecare
- 17 Hemodynamic monitoring and cardiovascular status determination
- 18 Pediatric neonatal care

19 Transportation of patients

Surgical Technology

- 1 Define medical terminology.
- 2 Differentiate between medical terms.
- 3 Identify the normal structure and functions of the human body.
- 4 Demonstrate the ability to function as a cooperative and considerate operating room team member.
- 5 Recognize the importance of teamwork, consideration, and cooperation.
- 6 Respect the patient's inherent right to privacy, dignity and confidentiality.
- 7 Differentiate between sterilization methods used for instrument and equipment.
- 8 Comprehend the utilization of pharmacologic agents used in surgical procedures.
- 9 Anticipate the needs of the surgeon during surgical procedures.
- 10 Expedite surgical procedures to minimize the patient's exposure to surgical and anesthetic stress.
- 11 Respond to emergency situations using sound judgement and a calm and efficient manner.
- 12 Display manual dexterity in the use of surgical instruments and equipment.
- 13 Develop important skills in the organization of work, economy of time, motion, and materials to better assist the surgeon.
- 14 Demonstrate the ability to perform independently in the operating room delivering direct patient care, during and after surgery.
- 15 Recognize legal and policy limits of individual responsibility.
- 16 Function as a member of the surgical team in the surgical suite.
- 17 Demonstrate initiative in expanding knowledge of new surgical procedures and subject relating to the operating room and to the surgical patient.
- 18 Describe proper procedures of basic and workplace safety concepts.
- 19 Explain microbiology in relation to the surgical patient and aseptic technique.
- 20 Demonstrate the application of correct aseptic technique.
- 21 Demonstrate the use of basic care preparation skills and the creation and maintenance of the sterile field.
- 22 Perform the role of the scrub person.
- 23 Perform the role of the circulator.
- 24 Demonstrate the accountability as a health care professional by recognizing the legal and ethical policy limits of individual responsibility and respecting the rights of the patient by maintaining confidentiality and privacy.
- 25 Demonstrate advance surgical procedures.

BUSN

Accounting Assistant

- 1 Record business transactions in the general ledger for service, merchandising, and manufacturing concerns utilizing the corporation form of business as the business entity.
- 2 Process ledger accounts of business, both controlling and subsidiary ledgers.
- 3 Record petty cash receipts and disbursements, and have a working knowledge of banking procedures, including reconciliation of bank statement with the general ledger.
- 4 Compute gross pay and deductions of employees and payroll taxes paid by the employer.

- 5 Prepare entries to record transactions on the cash and accrual basis.
- 6 Assist in the closing of the books at the end of the accounting period (prepare adjusting and closing entries, formal statements, etc).
- 7 Compute the composition and valuation of receivables and inventories.
- 8 Compute the depreciation of plant and equipment using various methods of estimation, record exchange and sale of these assets.
- 9 Utilize microcomputers in recording of accounting data and in the preparation of business documents and spreadsheets.
- 10 Demonstrate an ability to communicate effectively through oral and written communication methods.
- 11 Explore the application of psychological principles to human relations problems.

Accounting Associate

ASSOCIATE DEGREE

- 1 Record business transactions in the general ledger for service, merchandising and manufacturing concerns utilizing the corporation form of business as the business entity.
- 2 Identify and work with basic accounting concepts, principles, and systems of internal control and ethics.
- 3 Complete the various steps in the accounting cycle.
- 4 Analyze and record accounting transactions in a microcomputer environment.
- 5 Develop a full understanding of the nature of basic financial statements and management reports, as well as, limitations that are involved in their preparation.
- 6 Prepare and develop skills for performance evaluation using budgets.
- 7 Compute composition and valuation of receivables and inventories.
- 8 Prepare entries to record the purchase, sale, and adjust valuations of investments.
- 9 Compute depreciation of plant and equipment using various methods of estimation, record exchange and sale of assets.
- 10 Classify and record transactions involving the equity of a company: liabilities, contributed capital, and earnings retained by the company.
- 11 Prepare financial statements from incomplete records and correct errors made previously in recording transactions and evaluating accounts.
- 12 Use electronic data processing equipment generating accounting reports and management information data.
- 13 Apply skills and knowledge acquired in Business Law course.
- 14 Apply skills and knowledge acquired in Management courses.
- 15 Identify the current problems of the international economy.
- 16 Understand operation of markets for goods, services and factors of production and behavior of firms in different types of competition, income distribution, and international exchange.
- 17 Demonstrate an ability to communicate effectively through oral and written communication methods.
- 18 Exhibit proficiency in basic algebraic concepts.
- 19 Understand a period of United States history.
- 20 Understand the basic principles of the three branches of the national government.

CERTIFICATE OPTION PAYROLL

- 1 Understand and apply the provisions of the various laws that cover the preparation of payroll.
- 2 Understand the differences between an employee and an independent contractor.
- 3 Compute regular and overtime earnings, including the special overtime rules for items such as tips and comp time.

Division Dsc/Pgm Option # Competencies

- 4 Compute the Social Security taxable wage base and the amount of OASDI tax.
- 5 Compute the amount of HI tax (Medicare).
- 6 Determine federal, state and city income tax withholding.
- 7 Determine the appropriate treatment of employee benefits such as retirement plans, flexible benefit plans, and fringe benefits.
- 8 Compute the appropriate wage base and tax amounts under the Federal Unemployment Tax Act (FUTA) and the state's unemployment tax law (SUTA).
- 9 Prepare appropriate journal entries for payroll.
- 10 Prepare a computerized payroll using Excel or a payroll program.

MICROCOMPUTER ACCOUNTING CERTIFICATE

- 1 Record business transactions in the general ledger for both service and merchandising concerns utilizing the corporation form of business as the business entity.
- 2 Identify and work with basic accounting concepts, principles, and systems of internal control and ethics.
- 3 Complete the various steps in the accounting cycle.
- 4 Analyze and record accounting transactions in a microcomputer environment.
- 5 Develop a full understanding of the nature of basic financial statements and management reports, as well as, limitations that are involved in their preparations.
- 6 Prepare budget and development skills for performance evaluations using budgets.
- 7 Compute the composition and valuation of receivables and inventories.
- 8 Prepare entries to record the purchase, sale, and adjust valuations of investments.
- 9 Compute depreciation of plant and equipment using various methods of estimation, record exchange and sale of assets.
- 10 Classify and record transactions involving the equity of a company: liabilities, contributed capital, and earnings retained by the company.
- 11 Prepare financial statements from incomplete records and correct errors made previously in recording transactions and evaluating accounts.
- 12 Use electronic data processing equipment to generate accounting and management reports.
- 13 Apply management skills and knowledge.
- 14 Understand operation of markets for goods, services and factors of production and behavior of firms in different types of competition, income distribution, and international exchange.
- 15 Demonstrate an ability to communicate effectively through oral and written communication methods.
- 16 Utilize tax software to prepare tax forms for individuals with varying circumstances.
- 17 Identify and prepare a majority of the tax forms normally encountered by individual taxpayers.
- 18 Prepare tax forms for small business and recognize the relationship between small businesses and individual taxes.
- 19 Evaluate, recommend, install, and use microcomputer hardware for business applications.
- 20 Exhibit a solid foundation in computer technology and the use of microcomputers as productivity tools including access to the World Wide Web.
- 21 Utilize the power of a word processing package to accomplish workforce demands such as creating, formatting, and customizing documents, designing tables, performing merges, preparing reports, including master and sub-documents, creating on-line forms, and integrating word processing software with other application software packages thereby decreasing repetitive clerical work and increasing productivity and profits.
- 22 Employ a spreadsheet package to design and create worksheets that employ a variety of techniques to analyze and evaluate information therefore providing a business with the information base needed to make profitable financial decisions.

- 23 Capture the power of a database application program to produce queries, develop professional reports, customize forms and input masks, import data, create parameter queries, link multiple tables, produce macros, switchboards, and custom menus, and create function and event procedures in order to supply timely, accurate, business information.
- 24 Demonstrate competence to confront the challenges created by the rapid changes in accounting and technology which demands the continuous implementation of new hardware and the ability to rapidly learn new software to meet the challenges

Business

CERTIFIED PROFESSIONAL SECRETARY CERTIFICATE

- 1 Demonstrate an understanding of measuring and recording financial data for an economic unit including journalizing transactions, adjusting entries for revenue and expense items, inventories, depreciation, internal control with an emphasis on cash, current and long-term liabilities, and accounting for corporation stock transactions.
- 2 Recognize the overall picture of business operations in modern society.
- 3 Demonstrate an understanding of analysis of cost behavior with an emphasis on the accumulation of product costs and budgeting for planning and performance evaluation.
- 4 Understand/use legal terminology and basic principles of contracts as in today's business settings.
- 5 Understand macro and micro economic issues and theories.
- 6 Demonstrate ability to use current application computer software to solve realistic business problems by integrating data from word-processing, spreadsheet, and database products.
- 7 Apply psychological principles to human relations problems with special emphasis on group dynamics, interpersonal communications, and decision making.

CSR (CITY OF TULSA OPTION) CERTIFICATE OF ACHIEVEMENT I

- 1 Know current issues related to workplace diversity and working in teams.
- 2 Be able to use basic features of a word processing software package.
- 3 Use the basic features of the Windows operating environment.
- 4 Demonstrate an ability to communicate effectively through written communication methods.
- 5 Develop and implement a customer service strategy.
- 6 Demonstrate an ability to communicate effectively through oral communication.
- 7 Perform daily Utilities Services Personal Credit activities based on department policies and procedures using utility information systems and other required resources.
- 8 Perform daily Utilities Services Commercial Billing activities based on department policies and procedures using utility information systems and other required resources.
- 9 Perform daily Utilities Services Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 10 Perform daily Utilities Services Personal Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 11 Perform daily Utilities Services Telephone Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 12 Perform daily Utilities Services New Accounts activities based on department policies and procedures using utility information systems and other required resources.
- 13 Perform daily Utilities Services general activities based on department policies and procedures using utility information systems and other required resources.
- 14 Perform daily Utilities Services Computer activities based on department policies and procedures using utility information systems and other required resources.
- 15 Perform daily Utilities Services Non-commercial Billing activities based on department policies and procedures using utility information systems and other required resources.

CSR (CITY OF TULSA OPTION) CERTIFICATE OF ACHIEVEMENT II

- 1 Apply mathematics fundamentals to business applications by use of touch method on ten-key electronic calculator.
- 2 Be able to use basic features of spreadsheet software on the personal computer.
- 3 Be able to use advanced features of word processing software on the personal computer.
- 4 Demonstrate ability to apply written communication skills to business-related documents.
- 5 Use knowledge of city government issues to understand how they apply to various departments within City of Tulsa.
- 6 Perform daily Utilities Services Credit activities based on department policies and procedures using utility information systems and other required resources.
- 7 Perform daily Utilities Services Commercial Billing activities based on department policies and procedures using utility information systems and other required resources.
- 8 Perform daily Utilities Services Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 9 Perform daily Utilities Services Personal Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 10 Perform daily Utilities Services Telephone Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 11 Perform daily Utilities Services New Accounts activities based on department policies and procedures using utility information systems and other required resources.
- 12 Perform daily Utilities Services general activities based on department policies and procedures using utility information systems and other required resources.
- 13 Perform daily Utilities Services Computer activities based on department policies and procedures using utility information systems and other required resources.
- 14 Perform daily Utilities Services Non-commercial Billing activities based on department policies and procedures using utility information systems and other required resources.

CUSTOMER ACCOUNT REPRESENTATIVE - CITY OF TULSA OPTION

- 1 Apply knowledge and skills, become more productive, and have opportunities for advancement with the City of Tulsa.
- 2 Apply knowledge from a broad academic background and intensive business training to business situations.
- 3 Understand implications of social, political, legal, economic, competitive and technical environmental variables of business.
- 4 Demonstrate an ability to communicate effectively through written communication methods.
- 5 Know where to locate business information and statistics.
- 6 Be able to use word processing and spreadsheet software on the personal computer.
- 7 Apply mathematics fundamentals to business applications by use of touch method of ten-key electronic calculator.
- 8 Understand language and principles of accounting.
- 9 Demonstrate specialized business knowledge in select area.
- 10 Use knowledge of United States history and political science to understand environment of business.
- 11 Understand a period of United States history.
- 12 Understand basic principles of three branches of national government.
- 13 Develop and implement a customer service strategy.
- 14 Know current issues related to workplace diversity and working in teams.

Division Dsc/Pgm Option # Competencies

- 15 Perform daily Utilities Services Credit activities based on department policies and procedures using utility information systems and other required resources.
- 16 Perform daily Utilities Services Commercial Billing activities based on department policies and procedures using utility information systems and other required resources.
- 17 Perform daily Utilities Services Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 18 Perform daily Utilities Services Personal Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 19 Perform daily Utilities Services Telephone Customer Service activities based on department policies and procedures using utility information systems and other required resources.
- 20 Perform daily Utilities Services New Accounts activities based on department policies and procedures using utility information systems and other required resources.
- 21 Perform daily Utilities Services general activities based on department policies and procedures using utility information systems and other required resources.
- 22 Perform daily Utilities Services Computer activities based on department policies and procedures using utility information systems and other required resources.
- 23 Perform daily Utilities Services Non-commercial Billing activities based on department policies and procedures using utility information systems and other required resources.

EXECUTIVE ASSISTANT

- 1 Understand the history of the United States.
- 2 Understand the principles of government in the United States.
- 3 Demonstrate ability in usage of essential writing skills.
- 4 Demonstrate ability to use secondary sources and/or write effective business letters, memorandums, minutes, and research reports.
- 5 Apply psychological principles to human relations problems with special emphasis on group dynamics, interpersonal communications, and decision making.
- 6 Demonstrate an understanding of the fundamental principles of double-entry accounting as applied to practical business situations including debit and credit rules of accounting, financial statements, the accounting cycle, special journals, and payroll accounting or
- 7 Demonstrate an understanding of measuring and recording financial data for an economic unit including journalizing transactions, adjusting entries for revenue and expense items, inventories, depreciation, internal control with an emphasis on cash, current and long-term liabilities, and accounting for corporation stock transactions.
- 8 Develop and improve keyboarding speed and accuracy.
- 9 Understand concepts, terminology, and the support functions of word processing systems.
- 10 Edit, arrange, and produce error-free copy in preparing correspondence, manuscripts, forms, tables, and reports.
- 11 Operate and transcribe from machine transcription equipment.
- 12 Understand and/or use telecommunications, electronic mail, office copiers, facsimile, telephone systems, Internet, and printers.
- 13 Correctly apply basic rules of spelling, punctuation, and grammar.
- 14 Organize and maintain records in alphabetic, subject, numeric, and geographic filing systems.
- 15 Demonstrate the ability to solve business mathematical problems using the touch method on ten-key electronic calculators.
- 16 Perform receptionist duties and handle all incoming and outgoing telephone calls.
- 17 Organize office routine, set priorities, and schedule long and short-term projects.

- 18 Compose and produce written communications from oral instructions and longhand notations with a minimum of supervision.
- 19 Recognize and make decisions concerning interrelationships of office environment, employees, equipment, and information processing.
- 20 Perform all duties while maintaining a pleasant attitude, professional appearance and harmonious working relationship with other people.
- 21 Understand desktop publishing concepts, terms, and techniques.
- 22 Know management functions, processes, and various leadership styles.
- 23 Understand the integration of modern office technology.
- 24 Receive practical and technical skills experience beyond the scope of the classroom.

GENERAL OPTION

- 1 Apply knowledge and skills necessary for immediate employment in a variety of positions in the business field.
- 2 Apply knowledge from a broad academic background and intensive business training to business situations.
- 3 Exhibit potential for growth in a business environment.
- 4 Understand implications of social, political, legal, economic, competitive and technical environmental variables on business.
- 5 Demonstrate an ability to communicate effectively through written communication methods.
- 6 Understand fundamentals of marketing, including marketing mix and segmentation.
- 7 Know where to locate business information and statistics.
- 8 Be able to use word processing and spreadsheet or database software on personal computer.
- 9 Understand techniques for managing human, financial, and material resources.
- 10 Apply mathematics fundamentals to business applications by use of touch method on ten-key electronic calculator.
- 11 Understand language and principles of accounting.
- 12 Understand concept of control.
- 13 Know techniques to develop business plans and forecasts.
- 14 Demonstrate specialized business knowledge in select areas.
- 15 Use knowledge of United States history and political science to understand environmental business.
- 16 Identify current problems of the aggregate economy.
- 17 Explore direct application of psychological principles to human relations problems.
- 18 Understand a period of United States history.
- 19 Understand basic principles of three branches of national government.

INSURANCE CUSTOMER SERVICE REPRESENTATIVE OPTION

- 1 Demonstrate knowledge of insurance principles and practices and the most popular insurance contracts.
- 2 Communicate effectively in verbal and written form.
- 3 Describe current customer service practices, concepts, and trends.
- 4 Apply basic knowledge of computers as a productivity tool.
- 5 Apply mathematics fundamentals to business applications using a calculator.
- 6 Apply knowledge from an overview of the field of business.

RECEPTIONIST CERTIFICATE

- 1 Develop and improve keyboarding speed and accuracy.

- 2 Demonstrate the ability to solve business mathematical problems using the touch method on ten-key electronic calculators.
- 3 Understand concepts, terminology, and the support functions of word processing systems.
- 4 Edit, arrange, and produce error-free copy in preparing correspondence, manuscripts, forms, tables, and reports.

Computer Information Systems

ADOBE MASTER DESIGN SPECIALIST

- 1 Process digital images obtained from a variety of sources by performing or using color correction, compression, use of composites, filters, masks, layers, paths, channels, and other special effects for print and web use using Adobe Photoshop.
- 2 Create and combine documents for review, streamline review management, use commenting tools and efficiently integrate comments, benefit from enhanced file viewing and navigation, create forms, incorporate built-in accessibility, create secure searchable archives, create rich-media files, and produce high-quality output using Adobe Acrobat.
- 3 Create vector graphics for print production and web use using Adobe Illustrator.
- 4 Prepare multiple-page typeset quality documents using Adobe InDesign while integrating Adobe Photoshop and Adobe Illustrator skills.
- 5 Create media-rich and database-driven web sites using Adobe GoLive's print-to Web production features while integrating other Adobe design products.
- 6 Create digital video with real-time editing, multiple nested timelines, project management tools, advanced color correction, and enhanced audio editing using Adobe Premiere while integrating other Adobe design products.
- 7 Prepare digital audio which includes recording, mixing, analyzing, looping, editing, and mastering audio; noise reduction and audio restoration; spectrum and phase analysis tools; and high-quality effects using Adobe Audition.
- 8 Create 2D and 3D compositions, animations, and visual effects for film, video, DVD, and web use while performing motion tracking, network rendering and scripting, warping and distortion effects, advanced visual effects, advanced particle system, and smart mask interpolation using Adobe AfterEffects.

COMPUTER USER CERTIFICATE OPTION

- 1 Exhibit a solid foundation in computer technology, computer nomenclature, and the use of microcomputers as productivity tools including access to the World Wide Web.
- 2 Attain a comfort level with the Windows operating system including terminology, mouse operations, file and folder management, document assembly, built-in applications, resource requirements, customization, and OLE.
- 3 Gain a basic understanding of World Wide Web terminology and become proficient in browsing and searching the World Wide Web.
- 4 Utilize advanced techniques of a word processing package to accomplish workplace demands by being able to change setup defaults, understand text blocking, create styles, understand macros, sort and merge documents, use desktop publishing features, and examine manuscript tools.
- 5 Accomplish the following advanced spreadsheet techniques: customize a worksheet, change printer page setup, examine the database functions, create a graphical chart, utilize shortcut tools, utilize lockup tables, develop macros, and examine advanced mathematical functions.

DIGITAL VIDEO OPTION - Associate Degree

- 1 Demonstrate an understanding of the writing process and the use of effective writing skills.
- 2 Demonstrate critical reading, thinking, and writing skills through analysis and evaluation of reading selections and techniques of research and documentation or demonstrate objectivity, clarity, and precision in writing for a specific audience or demonstrate appropriate audience analysis and business writing style in preparation of various forms of business communications.

- 3 Demonstrate an understanding of techniques and practices of video production using broadcast video technology, basic video skills, both in the studio and on location, including pre-production, production, and post-production, as well as basic lighting and audio production.
- 4 Demonstrate an understanding of fundamental concepts of basic mathematics, algebra, right-triangle trigonometry, functions and graphs, factoring and algebraic functions, systems of linear equations, quadratic equations, exponents and radicals, exponents and logarithms, trigonometric functions, complex numbers and oblique triangles and vectors or demonstrate an understanding of relations and functions, graphing using transformations, algebra of functions, conic sections, polynomial and rational functions, systems of equations, matrices, exponential and logarithmic functions, binomial theorem, sequences and series, and applications.
- 5 Demonstrate an understand United States history commencing with the European background and first discoveries to the Civil War Era or demonstrate an understanding of United States History commencing with the Civil War Era to the present day.
- 6 Demonstrate an understanding of the principles, structure, processes, and functions of the United States federal government.
- 7 Demonstrate an understanding of the principles elements of two-dimensional design including color, perspective, fundamental drawing concepts and compositional elements.
- 8 Demonstrate an understanding of three-dimensional art forms including line, mass, space, texture, and form as related to various three-dimensional materials or demonstrate an understanding of the concepts of drawing.
- 9 Demonstrate an understanding of darkroom photography including historical techniques, black and white film exposure, processing and printing, equipment selection, image manipulation, color theory, and digital applications.
- 10 Demonstrate an understaing of the Macintosh operating system including launching and running multiple applications, performing basic operations, and file management techiques.
- 11 Demonstrate an understanding of the processing of digital images including image acquisition, editing and manipulation, color models, color balance adjustment, and special effects or demonstrate an understanding of the processing of digital images including color correction, compression, use of composites, filters, masks, layers, paths, channels, and other special effects.
- 12 Demonstrate an understanding of ray-traced images including designing and constructing 3D objects with surface detail, mapping textures, fundamental modeling tools, and techniques.
- 13 Demonstrate an understanding of the role of computers in all aspects of global society plus demonstrate the ability to use Microsoft Windows, Word, Excel, Access, PowerPoint, and the Internet for academic and professional use.
- 14 Demonstrate an understanding of basic 2D animation principles and the role that computers play in 2D animation plus demonstrate the ability to create animations using Flash.
- 15 Demonstrate an understanding of ray-traced 3D animation plus demonstrate the ability to create animations using Lightwave.
- 16 Demonstrate an understanding of graphics, digital images, animation, sound, and digital video using a variety of software applications to create educational and information presentations.
- 17 Demonstrate an understanding of interactive mutimedia development by creating interactive multimedia projects and web pages.
- 18 Demonstrate an understanding of portfolio development.
- 19 Demonstrate an understanding of nonlinear digital video editing.
- 20 Demonstrate an advanced understanding of nonlinear digital video editing with intergration of graphics, audio, animation, and special effects.
- 21 Demonstrate an understanding of the advanced concepts of drawing, typography, graphic design, HyperText Markup Language, web applications, vector graphics, desktop publishing, recording studio techniques, or speech communications.

MICROSOFT OFFICE SPECIALIST OPTION

- 1 Employ standard usage of essential writing skills.
- 2 Utilize critical reading, thinking, and writing skills.

- 3 Understand relations and functions, graphing using transformations, algebra of functions, conic sections, polynomial and rational functions, systems of equations, matrices, exponential and logarithmic functions, binomial theorem, sequences and series, and applications.
- 4 Appreciate United States history, commencing with the European background and first discoveries to the early national experience of the Civil War Era or commencing with the Civil War Era to the present day.
- 5 Understand the principles, structure, processes, and functions of the United States federal government.
- 6 Comprehend the communication process, audience analysis, research, organization, logic, ethical use of evidence, delivery, and listening or demonstrate an understanding of communication in dyadic (one-on-one) and human interactive situations.
- 7 Demonstrate the ability to perform four of the following seven tasks based upon the student's choice of electives: A. Measure and record financial data for an economic unit. B. Analyze cost behavior with an emphasis on the accumulation of product costs and budgeting for planning and performance evaluation. C. Exhibit an understanding of business operation. D. Apply mathematics fundamentals to business operation. E. Understand the basic theory principles of marketing. F. Comprehend the relations and functions, graphing using transformations, algebra of functions, conic sections, polynomial and rational functions, systems of equations, matrices, exponential and logarithmic functions, binomial theorem, sequences and series, and applications. G. Comprehend basic statistical terminology, organization of data, measures of central tendency and dispersion, hypothesis testing, and related statistical techniques.
- 8 Demonstrate an understanding of the operational organization of the computer and provide an orientation to the terminology and use of computers in processing data.
- 9 Complete complex documents for business use.
- 10 Use a spreadsheet to express, analyze, and solve business-related problems.
- 11 Create, update, and query a database and generate reports.
- 12 Make use of the features of a Windows Operating System, including the ability to perform customization, disk and file management, linking and embedding, updating on-line, installation procedures, and troubleshooting, and to utilize system tools.
- 13 Develop presentations suitable for professional purposes and understand the underlying functionality of presentation software.
- 14 Utilize a powerful integrated messaging, scheduling, and information management tool.
- 15 Prepare for one or more of the following exams: the Microsoft Office Specialist Word and/or Excel Expert exams, the Access and/or Outlook Core exams, and/or the PowerPoint comprehensive exam.

NETWORKING OPTION

- 1 Demonstrate an ability to communicate effectively through written and oral communication methods.
- 2 Exhibit proficiency in basic algebraic concepts.
- 3 Understand a period of United States history.
- 4 Understand the basic principles of the three branches of the national government.
- 5 Identify specialized fields within business organizations.
- 6 Explain issues relating to hardware and software for networks, network configuration and topologies, data transmission/protocol, standards, and network interconnectivity.
- 7 Exhibit proficiency in creating and managing files, running programs, and using system devices.
- 8 Explain differences among various network operating systems.
- 9 Evaluate, recommend, install, and use program packages for business applications on microcomputers and LAN.
- 10 Explain the issues involved in administering a LAN installation including management, LAN configuration performance, security, documentation and software licensing.
- 11 Explain the data communication concepts and terminology associated with networks, protocols, topologies, standards, equipment, and application.
- 12 Explain the System Development Life Cycle and how it can be applied in the environment.

- 13 Apply network administration principles to a network operating system.
- 14 Demonstrate an ability to plan, analyze, design and install a LAN system.
- 15 Evaluate, recommend, install, and use microcomputer and network hardware for business applications.
- 16 Perform data entry operations using microcomputers and various software application packages.
- 17 Explain how to administer user accounts, group accounts and establish user rights.
- 18 Explain how to create and manage e-mail service in a networked environment.
- 19 Explain how to monitor system performance, identify bottlenecks, and implement viable backup procedures.

PROGRAMMING OPTION

- 1 Code problem solutions in commonly used programming languages from equivalent program definition specifications.
- 2 Create problem solutions of typical business applications utilizing flowcharts, decision tables, file descriptions, the narrative, forms design, and block diagrams. Can apply college algebra, inferential statistics, and principles of accounting to the solution of these applications.
- 3 Identify and correct errors in programs and recognize successful output. Providing own test data, student tests, checks, revises, and refines the computer program to produce the product required by written specifications.
- 4 Provide procedural documentation to enable program to run as part of system by computer operating personnel and complete program documentation for future program maintenance.
- 5 Communicate with users, co-workers, and supervisors both verbally and in writing, including technical reports utilizing data processing and basic mathematics and accounting terminology.
- 6 Apply current hardware concepts and capabilities.
- 7 Apply current concepts and capabilities of operating systems including scheduling resource and allocation, and programmer/operator communication in a multi-programming environment.
- 8 Apply relational data base concepts.
- 9 Interface data processing with the business environment.
- 10 Revise existing programs, make refinements, reduce operating time, or improve present techniques.
- 11 Develop programming specifications such as screen layouts, file layouts, print charts, etc.
- 12 Design and document program logic using such tools as flowcharts, and pseudocode.
- 13 Write, debug, test, and document an applications program in a major programming language.
- 14 Maintain programs written in the above languages.
- 15 Explain some of the issues relating to hardware/software for networks, network configuration, and topologies, data transmission and protocol, standards, and network connectivity.
- 16 Demonstrate an ability to communicate effectively through written and oral communication skills.
- 17 Understand a period of United States history.
- 18 Understand basic principles of three branches of national government.

SYSTEMS SUPPORT TECHNICIAN OPTIONS

- 1 Communicate effectively by written communications.
- 2 Communicate orally with native speakers of the target language as an educated speaker.
- 3 Understand a period of United States history.
- 4 Understand three national government branch principles.
- 5 Analyze business applications as they pertain to microcomputer technology.
- 6 Evaluate, recommend, install, and use microcomputer hardware for business applications.
- 7 Evaluate, recommend, install, and use packages for business applications on microcomputers.

Division Dsc/Pgm Option # Competencies

- 8 Communicate with users, managers, customers, vendors, and others relating to business applications and microcomputers.
- 9 Perform data entry operations using microcomputers as stand-alone computers or as terminals to mainframe application.
- 10 Operate most popular microcomputer systems with minimal additional training.
- 11 Operate minicomputer systems after additional training on the employer's system.
- 12 Administer the operation of a small computer installation.
- 13 Understand many customer types and be able to effectively deal with customers and their problems in person or by phone.
- 14 Understand the different businesses within the travel industry, the functions of each, and the interrelations among them.
- 15 Demonstrate an ability to communicate effectively through written and oral communication skills.
- 16 Understand a period of United States history.
- 17 Understand basic principles of three branches of national government.

UNIX OPTION

- 1 Code program solutions using C language and UNIX shell programming language.
- 2 Fully test/debug programs to meet program specifications.
- 3 Implement programs in a UNIX environment, including the use of SCCS and Make files.
- 4 Write UNIX shell scripts which include the use of variables and control structures. Make use of AWK and SED.
- 5 Utilize the VI Editor effectively.
- 6 Understand and manage the UNIX file structure.
- 7 Understand how to set up and maintain file systems, networks, devices, and users. Automate system maintenance tasks through the use of shell scripts.
- 8 Design and develop graphical user interfaces using the X Windows system.
- 9 Set up/maintain file systems, networks, devices, and users. Automate system maintenance tasks using shell scripts.
- 10 Plan, set up, maintain and troubleshoot UNIX TCP/IP network.
- 11 Maintain and configure subsystems for printing, electronic mail, and X Windows.
- 12 Plan a backup strategy. Carry out backup and restore operations.
- 13 Demonstrate an ability to communicate effectively through written and oral communication skills.

WEB DESIGN ESSENTIALS OPTION - CERTIFICATE

- 1 Discuss the tools available for designing and developing an effective personal or corporate presence on the web.
- 2 Create and manipulate bitmapped and vector graphics using Macromedia Fireworks.
- 3 Create animations and web sites using Macromedia Flash.
- 4 Create and maintain a web site using Macromedia Dreamweaver. Integrate Macromedia Dreamweaver, Fireworks, and Flash for effective and efficient web site design.
- 5 Develop a personal or business web site under the guidance of the instructor using the Macromedia suite of tool.

WEB DESIGN OPTION

- 1 Demonstrate an understanding of the writing process and the use of effective writing skills.

- 2 Demonstrate critical reading, thinking, and writing skills through analysis and evaluation of reading selections and techniques of research and documentation or demonstrate objectivity, clarity, and precision in writing for a specific audience or demonstrate appropriate audience analysis and business writing style in preparation of various forms of business communications.
- 3 Demonstrate an understanding of fundamental concepts of basic mathematics, algebra, right-triangle trigonometry, functions and graphs, factoring and algebraic functions, systems of linear equations, quadratic equations, exponents and radicals, exponents and logarithms, trigonometric functions, complex numbers, and oblique triangles and vectors or demonstrate an understanding of relations and functions, graphing using transformations, algebra of functions, conic sections, polynomial and rational functions, systems of equations, matrices, exponential and logarithmic functions, binomial theorem, sequences and series, and applications.
- 4 Demonstrate an understand United States history, commencing with the European background and first discoveries to the Civil War Era or demonstrate an understanding of United States history commencing with the Civil War Era to the present day.
- 5 Demonstrate an understand the principles, structure, processes, and functions of the United States federal government.
- 6 Demonstrate an understanding of the communication process, audience analysis, research, organization, logic, ethical use of evidence, delivery, and listening or demonstrate an understanding of communication in dyadic (one-to-one) communication and human interactive situations.
- 7 Demonstrate an understanding of the principal elements of two-dimensional design including color, perspective, fundamental drawing concepts and compositional elements.
- 8 Demonstrate an understanding of darkroom photography including historical techniques, black and white film exposure, porcessing and printing, equipment selection, image manipulation, color theory, and digital applications.
- 9 Demonstrate and understanding of HyperText Markup Language, web page design, and efficiency principles and techniques.
- 10 Demonstrate an understanding of the process of digital images including color correction, compression, use of composites, filters, masks, layers, paths, channels, and other special effects or demonstrate an understanding of the processing of digital images including image acquisition, editing and manipulation, color models, color balance adjustment, and special effects.
- 11 Demonstrate an understanding of building web sites with Dreamweaver, creating interactive content with Flash, generating web graphics with Fireworks, incorporating vector graphics with FreeHand, and sharing and manipulating assets across the Macromedia suite.
- 12 Demonstrate an understanding of the Macintosh operating system including launching and running multiple applications, performing basic operations, and file management techniques.
- 13 Demonstrate an understanding of JavaScript to create dynamic content for the web through the use of variables, functions, objects, and events along with data types and operations.
- 14 Demonstrate an understanding of ColdFusion Markup Language, ColdFusion Components, integration with Microsoft's Active Server Pages and .NET as well as Sun Microsystem's Java Server Pages, XML handling, session management, and database connectivity.
- 15 Demonstrate an understanding of ray-traced images including designing and constructing 3D objects with surface detail, mapping textures, fundamental modeling tools, and techniques.
- 16 Demonstrate an understanding of the role of computers in all aspects of global society plus demonstrate the ability to use Mircsoft Windows, Word, Excel, Access, PowerPoint, and the Internet for academic and professional use.
- 17 Demonstrate an understanding of basic 2D animation principles and the role that computers play in 2D animation plus demonstrate the ability to create animations using Flash.
- 18 Demonstate an understanding of ray-traced 3D animation plus demonstrate the ability to create animations using Lightwave.
- 19 Demonstrate an understanding of graphics, digital images, animation, sound, and digital video using a variety of software applications to create educational and information presentations.
- 20 Demonstrate an understanding of interactive multimedia development by creating interactive multimedia projects and web pages.

- 21 Demonstrate an understanding of the fundamentals of art, drawing, typography, graphic design, introduction to computer programming, vector graphics, desktop publishing, Windows operating system, portfolio development, or digital video production.

WEB DEVELOPMENT

- 1 Demonstrate ability in standard usage of essential writing skills.
- 2 Demonstrate critical reading, thinking, and writing skills.
- 3 Demonstrate an understanding of relations and functions, graphing using transformations, algebra of functions, conic sections, polynomial and rational functions, systems of equations, matrices, exponential and logarithmic functions, binomial theorem, sequences and series, and applications.
- 4 Understand United States history, commencing with the European background and first discoveries to the early national experience of the Civil War Era or commencing with the Civil War Era to the present day.
- 5 Understand the principles, structure, processes, and functions of the United States federal government.
- 6 Demonstrate an understanding of the communication process, audience analysis, research, organization, logic, ethical use of evidence, delivery, and listening or demonstrate an understanding of communication in dyadic (one-to-one) and human interactive situations.
- 7 Explain issues relating to hardware and software for networks, network configuration and topologies, data transmission/protocol, standards, and network interconnectivity.
- 8 Apply relational database concepts.
- 9 Demonstrate an understanding of current computer applications, programming and logic.
- 10 Code problem solutions in commonly used web programming and scripting languages from equivalent program specifications.
- 11 Identify and correct errors in programs and recognize successful output. Providing own test data, the student tests, checks, revises, and refines the computer program to produce the product required by written specifications.
- 12 Provide procedural documentation to enable program to run as part of system by computer operating personnel and complete program documentation for future program maintenance.
- 13 Demonstrate the ability to create websites using Hypertext Markup Language.
- 14 Demonstrate the ability to create websites using industry-standard software applications.
- 15 Demonstrate the ability to create dynamic database-driven websites using both client and server-side programming/scripting languages.

WEBSITE MANAGEMENT OPTION

- 1 Explain some of the issues relating to hardware and software for networks, network configuration and topologies, data transmission, and protocol, standards, and network interconnectivity.
- 2 Apply network administration principles to a network operating system.
- 3 Explain how to administer user accounts, group accounts, and establish user rights.
- 4 Demonstrate the installation of TCP/IP protocol.
- 5 Exhibit the use of TCP/IP applications FTP, Telenet, and Ping.
- 6 Exhibit the installation of Internet Information Service.
- 7 Be able to configure WWW, FTP and Gopher services.
- 8 Demonstrate the ability to secure the Web site.
- 9 Be able to archive the website.
- 10 Apply a distinction between Intranet and Internet services and provide a secure use policy for both.
- 11 Understand the tools used for monitoring Internet and Intranet traffic.
- 12 Demonstrate a knowledge and use of protocol analysis tools for capacity planning, capacity relief, and acceptable use of network resources.

13 Know how to deliver a variety of network services through the use of the WWW server.

14 Demonstrate an ability to communicate effectively through written and oral communication skills.

15 Understand a period of United States history.

16 Understand basic principles of three branches of national government.

WINDOWS 2000 (MCSE PREPARATION) - CERTIFICATE

1 Use Visual Basic or Visual C++ to create a desktop database applications using the Visual Data Access Tools in VB and C++.

2 Use Visual Basic or Visual C++ to create Class Modules, ActiveX Data Objects and COM Components.

3 Use Visual Basic or Visual C++ to build data aware Internet applications.

4 Explain Microsoft's Enterprise Development Strategy.

5 Use Visual Basic or Visual C++ to build COM DLL's.

6 Use Visual Basic or Visual C++ to invoke stored procedures with SQL Server.

7 Use Visual Basic or Visual C++ to interface with Microsoft Transaction Server and MTS Transaction Services.

8 Use Visual Basic or Visual C++ to implement three tier Client/Server applications.

9 Use Visual C++ to develop applications using Microsoft Foundation Class Library.

10 Use Visual C++ to create ActiveX controls for database and Internet applications.

11 Demonstrate knowledge of MS SQL Server and Transact-SQL.

12 Use MS SQL Server to create databases, tables, indexes, advanced queries and Stored Procedures.

13 Implement Data Integrity, Views, Stored Procedures, Triggers, Transactions and Locks in MS SQL Server.

14 Use MS Access to create Desktop Applications.

15 Use MS Visual InterDev to develop Web solutions.

Economics

1 Illustrate on a graph how a free market arrives at equilibrium price and quantity.

2 Calculate a real value by adjusting a nominal value for a change in the price level.

3 Explain why an initial change in Total Expenditures leads to a multiplied change in Real GDP, according to Keynesian theory.

4 Determine the profit-maximizing quantity of output for a business to produce.

5 Determine the profit-maximizing quantity of labor for a business firm to employ.

Graphics & Imaging Technology

1 Communicate effectively through written composition.

2 Use critical reading, thinking, and writing skills to analyze, research, and evaluate written information.

3 Identify people, places, and events in American history from 1492 to the Civil War.

4 Identify people, places, and events in American history from Civil War to present.

5 Analyze the principles, structure, processes, and functions of the United States federal government.

6 Recognize practical applications of chemistry applied to topics of vital interest to society such as energy, polymers, foods, drugs, and pollution.

7 Apply fundamental chemistry principles to a variety of topics such as chemical bonding, chemical reactions, status of matter, solutions, electrochemistry, and nuclear chemistry.

Division Dsc/Pgm Option # Competencies

- 8 Describe the fundamental laws and theories of chemistry dealing with the structure and interactions of matter and the use of these principles as applied to the solution of quantitative problems relating to chemistry.
- 9 Survey the major areas of study in psychology, such as: motivation, learning, physiology, personality theories and treatment, social psychology, psychological disorders, perception, memory, and cognitive thought.
- 10 Apply psychological principles to human relations.
- 11 Converse effectively through oral communication.
- 12 Demonstrate interpersonal communication skills with both verbal and non-verbal communication behavior.
- 13 Demonstrate knowledge of safety techniques and procedures in the printing industry.
- 14 Identify career opportunities in the offset and flexographic industry.
- 15 Perform reproduction photography techniques and procedures.
- 16 Demonstrate image assembly, platemaking practices and techniques.
- 17 Perform basic press operations to create printed copy using an offset printing press.
- 18 Demonstrate knowledge of equipment and chemical safety procedures for operating presses, set up and operation, cleanup and maintenance procedures, and use of materials and chemicals.
- 19 Create graphics materials using basic electronic imaging.
- 20 Perform finishing and bindery operations.
- 21 Demonstrate advanced electronic imaging techniques utilizing software applications: Quark Xpress, Adobe Illustrator and Photoshop
- 22 Produce color reproduction using various offset and flexographic printing presses: AB Dick 360, AB Dick 8800 and 9850 with colorhead and Itek 975, AB Dick 3500 and Cadet Flexographic Press.

Human Resources

- 1 Apply principles, policies, and practices related to the administration of a Human Resources Department to the needs of a specific organization.
- 2 Perform the selection process, develop position specifications, recruit and interview applicants, hire and place employees.
- 3 Apply laws and current governmental regulations applicable to the administration of a Human Resources Department.
- 4 Provide direction and assistance to management in the area of group training and team building.
- 5 Apply fundamentals of labor management and develop appropriate analyses and documentation essential in the collective bargaining process.
- 6 Identify and utilize appropriate sources for gathering information required to make human resources decisions.
- 7 Perform human resource operations using basic computer knowledge and information systems.
- 8 Assess organizational training requirements, plan appropriate courses, develop programs, and conduct training sessions.
- 9 Apply historical perspectives and their effect on the changing role of human resource professionals in organizations which are evolving from an industrial to a technological/information structure.
- 10 Demonstrate an ability to review salary surveys, employee compensation systems, and salary planning including job analysis, compensation structuring and computer compensation generated programs.
- 11 Demonstrate a level of knowledge of benefits management in regard to company benefit plans, including health delivery systems, retirement plans, savings investment plans, and worker's compensation.
- 12 Record and measure financial data for an economic unit, analyze product costs, and prepare budgets.
- 13 Demonstrate an ability to communicate effectively through written communication methods.

14 Analyze the basic problems and principles of human experience and behavior.

15 Apply human resource skills to problems of business, industry, and employee relations.

16 Understand a period of United States history and the basic principles of the three branches of national government.

Interior Design

1 Maximize the use of design elements such as line, form, color, lighting, and texture in actual design work.

2 Employ in design projects the above elements with the basic design principles such as balance, needed contrast, harmony, scale, and environmental design.

3 Identify different periods of furnishings and architecture from the 15th century to contemporary work.

4 Achieve a professional level of space planning in all facets of design.

5 Understand and direct the selection of materials in compliance with codes and functional aspects of design.

6 Assemble probable costs with budget estimates in all phases of design production.

7 Be thoroughly fluid in all phases of vernacular, terms and description of designs.

8 Have communication skills in relation to design professional standards.

9 Be aware and capable of marketing professional design services.

10 Be proficient in communication skills in areas of space planning, perspective sketching, color delineation, and drafting skills.

11 Implement developed knowledge of the materials and methods of design solution presentation.

12 Develop inter-disciplinary written and oral communication skills.

13 Develop skills in relation to design tools such as CAD design.

14 Develop skills used in presentations such as drawing, sketching, and color delineation.

15 Be aware of the different types of business formations such as sole proprietor, corporations, and partnerships.

16 Know the liabilities in relation to the design practice.

17 Be aware of the fiduciary responsibilities.

18 Be knowledgeable of the various methods of compensation and fees for design services.

19 Be knowledgeable of effective time management.

20 Know and practice the ethics of design practice.

21 Be aware of opening doors to employment or staying employed.

22 Know the steps involved in opening a private practice.

23 Apply principles of psychology to problems of business, industry, and employee relations.

24 Understand a period of United States history.

25 Understand the basic principles of the three branches of the national government.

26 Analyze and record various accounting transactions and prepare financial statements.

27 Define steps involved in the selling process, make a successful sales presentation, and actively illustrate goal setting techniques.

28 Understand the interrelationship of the marketing mix with product life cycle.

International Business

1 Understand the fundamentals of international marketing, including marketing mix and segmentation.

Division Dsc/Pgm Option # Competencies

- 2 Plan, organize, staff, direct & control subordinates' work in multicultural environments and in firms engaged in international business.
- 3 Apply decision making and problem solving techniques.
- 4 Effectively manage within their scope of responsibility, human, financial, and material resources of organization.
- 5 Be exposed to international trade transactions.
- 6 Effectively host foreign business personnel.
- 7 Analyze adaptation to environment of a foreign country.
- 8 Develop cross-cultural training for the business and/or social environment.
- 9 Develop skills in at least one foreign language.
- 10 Prepare for cultural differences.
- 11 Evaluate social/cultural differences of various regions of the world and unique business operation aspects therein.
- 12 Explain business trends in various regions of the world.
- 13 Explain legal aspects of conducting business in a foreign country.
- 14 Discuss relationship between man and environment and his utilization of natural resources, dealing with problems of production, manufacturing and distribution of goods.
- 15 Describe basic concepts, theories, realities of national power, foreign policy, and international interactions.
- 16 Understand various periods of history and how they impact current business practices with foreign countries.
- 17 Understand history/culture of selected foreign region.
- 18 Aware of interrelationship of environmental factors of foreign situation, i.e. political, economic, regulatory, social, competitive and technological variables.

Legal Assistant

- 1 Meet the standards of legal ethics imposed by Oklahoma law.
 - 2 Deal effectively with legal clientele.
 - 3 Assist an attorney with trial preparation.
 - 4 Do legal research.
 - 5 Apply knowledge of the law and legal procedures in understanding and drafting legal agreements, documents and other papers in certain fields of the law.
 - 6 Exercise judgement and work independently with respect to assigned tasks, keeping and meeting deadlines.
 - 7 Prepare or interpret legal documents for review by lawyers.
 - 8 Analyze procedural problems and recommend solutions in certain fields of the law.
 - 9 Prepare detailed office procedures for efficient handling of specialized fields of the law.
 - 10 Draft written communications.
 - 11 Evaluate legal problems with regard to underlying governmental structures.
 - 12 Propose solutions to legal problems based on historical perspectives.
 - 13 Generate financial data.
 - 14 Propose and utilize computer based office systems.
 - 15 Upon satisfactory completion of the course requirements, graduates are eligible to apply for the examination given by the national Association of Legal Assistants, Inc. to become Certified Legal Assistants (CLA).
-

Management

FOOD MANUFACTURING TECHNOLOGY OPTION

- 1 Apply the basic principles and practices of management.
- 2 Plan, organize, staff, direct and control work of subordinates by means of group processes related to team building and Total Quality Management.
- 3 Effectively manage within their scope of responsibility, human, financial and material resources of the organization.
- 4 Perceive and support objectives of the total organization.
- 5 Utilize the management by objective process to accomplish organizational and corporate goals.
- 6 Conduct a job interview, train new employees, and prepare employee performance evaluations.
- 7 Apply decision making and problem solving techniques.
- 8 Develop sound practices of communication, human relations and labor/management relations.
- 9 Demonstrate an ability to communicate effectively through oral and written communication methods.
- 10 Develop team management, attitude development, and relationship skills.
- 11 Understand techniques for managing change effectively.
- 12 Effectively apply leadership and group process skills.
- 13 Develop sound conflict resolution skills.
- 14 Recognize the legal and ethical responsibilities of managers in the organization.
- 15 Demonstrate knowledge of Equal Employment and applicable laws affecting the organization.
- 16 Apply contemporary leadership concept and skills.
- 17 Recognize and diagnose performance issues.
- 18 Design and implement appropriate coaching strategies.

GENERAL OPTION

- 1 Apply the basic principles and practices of management.
- 2 Plan, organize, staff, direct and control work of subordinates by means of group processes related to team building and Total Quality Management.
- 3 Effectively manage within their scope of responsibility, human, financial and material resources of the organization.
- 4 Perceive and support objectives of the total organization.
- 5 Utilize the management by objective process to accomplish organizational and corporate goals.
- 6 Conduct a job interview, train new employees, and prepare employee performance evaluations.
- 7 Apply decision making and problem solving techniques.
- 8 Develop sound practices of communication, human relations and labor/management relations.
- 9 Utilize general economic principles as related to an organizational setting.
- 10 Demonstrate an ability to communicate effectively through written communication methods.
- 11 Develop an understanding of United States history and the functions of government.
- 12 Utilize basic organizational skills in the development and presentation of oral communications.
- 13 Utilize and apply accounting methods and procedures.
- 14 Provide the opportunity to enhance management studies in specific areas such as Health Care Management, Industrial Management and Leadership Development.

- 15 Apply basic knowledge of computer concepts/microcomputers. Demonstrate a specialty in relation to the occupational and educational needs of the student.

INDUSTRIAL MANAGEMENT OPTION

- 1 Apply the basic principles and practices of management.
- 2 Plan, organize, staff, direct and control work of subordinates by group processes related to team building and Total Quality Management.
- 3 Effectively manage, within their scope of responsibility, human, financial/material resources of organization.
- 4 Perceive and support objectives of the total organization.
- 5 Utilize the management by objective process to accomplish organizational and corporate goals.
- 6 Conduct a job interview, train new employees, and prepare employee performance evaluations.
- 7 Apply decision making and problem solving techniques.
- 8 Develop sound practices of communication, human relations, and labor/management relations.
- 9 Demonstrate an ability to communicate effectively through written communication methods.
- 10 Have understanding of U.S. history and government functions.
- 11 Apply accounting, business and mathematics fundamentals to the management setting.
- 12 Utilize basic organization skills in the development and presentation of oral communications.
- 13 Apply basic knowledge of computer concepts/microcomputers.
- 14 Apply basic industrial processes and sources of materials used in manufacturing related to tools/machines required for the fabrication of finished product.
- 15 Utilize industrial and system-engineering techniques related to production, inventory, quality, layout, method engineering, materials handling, and engineering economy.
- 16 Apply basic functions/techniques used in production, inventory control, traffic, and physical distribution/warehousing.
- 17 Develop fundamental concepts of control principles, objectives, evaluation, and improvements related to providing a quality product or service.
- 18 Demonstrate specialty in relation to occupational and educational needs of students.

INTERNATIONAL MANAGEMENT OPTION

- 1 Apply the basic principles and practices of management.
- 2 Plan, organize, staff, direct and control work of subordinates by group processes related to team building and Total Quality Management.
- 3 Effectively manage, within their scope of responsibility, the human, financial/material resources of the organization.
- 4 Perceive and support objectives of the total organization.
- 5 Utilize the management by objective process to accomplish organizational and corporate goals.
- 6 Conduct a job interview, train new employees, and prepare employee performance evaluations.
- 7 Apply decision making and problem solving techniques.
- 8 Develop sound practices of communication, human relations, and labor/management relations.
- 9 Utilize general economic principles as related to an organizational setting.
- 10 Demonstrate an ability to communicate effectively through written communication methods.
- 11 Develop an understanding of United States history and the functions of government.
- 12 Utilize and apply accounting methods and procedures.
- 13 Develop an understanding of international business practices and operations, and the international legal environment in which an international organization must operate.

14 Apply basic knowledge of computer concepts/microcomputers.

15 Develop skill related to speaking one foreign language.

16 Demonstrate speciality in relation to international occupational, and educational needs of students.

INTERNSHIP OPTION

1 Apply the basic principles and practices of management.

2 Plan, organize, staff, direct and control work of subordinates by processes related to team building and Total Quality Management. Effectively manage within their scope of responsibility the human, financial, and material resources of the organization.

3 Perceive and support objectives of the total organization.

4 Utilize the management by objective process to accomplish organizational and corporate goals.

5 Conduct a job interview, train new employees, and prepare employee performance evaluations.

6 Apply decision making and problem solving techniques.

7 Develop sound practices of communication, human relations, and labor/management relations.

8 Use identified supervisory/management skills required in entry/middle level management positions.

9 Utilize general economic principles as related to an organizational setting.

10 Demonstrate an ability to communicate effectively through written communication methods.

11 Develop understanding of U.S. history and functions of the government.

12 Utilize basic organizational skills in the development and presentation of oral communications.

13 Utilize and apply accounting methods and procedures.

14 Provide the opportunity to enhance management studies in specific areas such as Health Care Management, Industrial Management and Leadership Development.

15 Apply basic knowledge of computer concepts/microcomputers.

16 Demonstrate a speciality in relation to the occupational and educational needs of the student.

MANUFACTURING WORKPLACE LEADERSHIP OPTION

1 Apply the basic principles and practices of management.

2 Plan, organize, staff, direct and control work of subordinates by means of group processes related to team building and Total Quality Management.

3 Effectively manage within their scope of responsibility, human, financial and material resources of the organization.

4 Perceive and support objectives of the total organization.

5 Utilize the management by objective process to accomplish organizational and corporate goals.

6 Conduct a job interview, train new employees, and prepare employee performance evaluations.

7 Apply decision making and problem solving techniques.

8 Develop sound practices of communication, human relations and labor/management relations.

9 Demonstrate an ability to communicate effectively through written communication methods.

10 Perceive the overall picture of business operations.

11 Understand the role of business in modern society.

12 Effectively apply leadership and group process skills.

13 Develop sound conflict resolution skills.

14 Demonstrate an understanding of management in relation to leadership, motivation, and communication.

15 Recognize the legal and ethical responsibilities of managers in the organization.

- 16 Demonstrate knowledge of Equal Employment and applicable laws affecting the organization.
- 17 Develop organization and administration skills.

Marketing / E-business

- 1 Define steps involved in the selling process, make a successful sales presentation, and actively illustrate goal-setting techniques.
- 2 Describe several methods for adapting sales presentations to unique personalities.
- 3 Express an understanding of marketing as a profession.
- 4 Understand the interrelationship of the marketing mix with product life cycle.
- 5 Identify target markets, and define processes involved in consumer decision making.
- 6 Use sources of marketing information for basic market research and forecasting.
- 7 Explain process of advertising including planning, organizing, directing, creating and controlling an advertising campaign.
- 8 Understand basic economic theory.
- 9 Demonstrate an ability to communicate effectively through both oral/written communication methods.
- 10 Understand United States history.
- 11 Understand basic principles of the three branches of the national government.
- 12 Record financial data including journalizing transactions, inventories, depreciation, payroll accounting, preparation and interpretation of financial statements.
- 13 Identify specialized fields within business organizations.
- 14 Apply business law concepts in areas of torts, contracts, property, bailments, sales, and secured transactions as they relate to marketing.
- 15 Understand principles of supervision and team management.
- 16 Know computer terminology and how a computer operates in processing data.
- 17 Be able to use the computer in word and information processing including the ability to communicate via e-mail and to navigate the World Wide Web.
- 18 Be able to deal with challenging people in a positive and productive manner.
- 19 Describe current customer service practices, concepts, and trends.
- 20 Perform basic business mathematic calculations including some algebraic concepts.
- 21 Demonstrate the ability to create professional press releases, brochures, and newsletters.
- 22 Exhibit a strong understanding of computers, World Wide Web terminology, become proficient in World Wide Web research and relate marketing concepts to electronic delivery forms.
- 23 Demonstrate the ability to create a business related website designed to reach a selected target audience.
- 24 Demonstrate the ability to capture and edit images into both marketing projects and a website.

Purchasing & Materials Management

MATERIALS MANAGEMENT OPTION

- 1 Understand the basic functions and techniques used in purchasing, production and inventory control, traffic, logistics management, and warehousing.
- 2 Understand the integrated information system and its role in sourcing, the buying process, negotiations with suppliers, and controlling cost.
- 3 Understand need for forecasting, forecasting techniques, and where to find information for use in preparing forecasts.

Division Dsc/Pgm Option # Competencies

- 4 Understand forecasting purchasing, materials management, master production scheduling and their production scheduling relationship to various departments.
- 5 Be better prepared for the examination required by the APICS to become Certified in Production & Inventory Management.
- 6 Understand the importance of inventories, and inventory planning and control, in Capacity Management and Production Activity.
- 7 Illustrate the financial requirements, cost controls, budgets, and similar financing constraints involved in materials management.
- 8 Become familiar with Just-In-Time Inventory Control Techniques.
- 9 Understand the usage of computers in production, inventory, and purchasing operations.
- 10 Understand the principles of inventory record keeping.
- 11 Understand the principles of purchasing materials.
- 12 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 13 Understand the basic principles, components, and operations of the three branches of the national government.
- 14 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 15 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 16 Understand the principles and applications of human relations in the business setting.
- 17 Will have a basic understanding of contract law.
- 18 Understand the basics of value chain and demand-based management.

PRODUCTION CONTROL & INVENTORY MANAGEMENT OPTION

- 1 Understand purchasing information system and its role in sourcing, buying process, negotiations with suppliers, and controlling cost.
- 2 Understand need for forecasting, forecasting techniques, and where to find information for use in preparing forecasts.
- 3 Understand forecasting purchasing and materials management and their relationship to other departments.
- 4 Be better prepared for the examination administered by the APICS to become certified in Production and Inventory Management.
- 5 Understand the importance of inventories, inventory planning and control, in Capacity Management and Production Activity.
- 6 Illustrate the financial requirements, cost controls, budgets, and similar financing constraints involved in warehouse operations.
- 7 Become familiar with Just-In-Time Inventory Control Techniques.
- 8 Understand the principles of production planning and control. /li>
- 9 Understand the principles of inventory planning and control.
- 10 Understand the usage of computers in production, inventory, and purchasing operations.
- 11 Understand the principles of physical inventory record keeping.
- 12 Understand shipping and receiving techniques.
- 13 Understand the principles of purchasing materials.
- 14 Understand inter-departmental relations within a corporate structure.
- 15 Understand principles of warehousing goods.
- 16 Understand manufacturing management techniques using bills of materials, inventory, open order data and master production information to calculate requirements for materials, and to establish and maintain valid due dates on orders.

- 17 Understand the language and principles of accounting.
- 18 Identify and work with basic accounting concepts, principles, and systems of internal control.
- 19 Prepare the various steps in the accounting cycle.
- 20 Understand the basic computer terminology and provide student some competency in the areas of word processing, database, and spreadsheet software.
- 21 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 22 Understand the basic principles, components, and operations of the three branches of the national government.
- 23 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 24 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 25 Understand the principles and applications of human relations in the business setting.
- 26 Understand the basics of value chain and demand-based management.

PURCHASING MANAGEMENT OPTION

- 1 Be better prepared for the examination administered by the Institute for Supply Management (ISM).
- 2 Prepare a purchase order—general conditions and legal considerations.
- 3 Understand purchasing information system and its role in sourcing, the buying process, negotiations with suppliers, and controlling cost.
- 4 Understand the role of purchasing in business, its responsibility and interaction with other departments, purchasing ethics, and the buyer's responsibility.
- 5 Prepare for single or team negotiations.
- 6 Understand usage of computers in production, inventory, and purchasing operations.
- 7 Understand principles of purchasing of materials.
- 8 Understand pricing and negotiation techniques.
- 9 Understand inter-departmental relations within a corporate structure.
- 10 Understand principles of physical inventory record keeping.
- 11 Understand shipping and receiving techniques.
- 12 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 13 Understand the basic principles, components, and operations of the three branches of the national government.
- 14 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 15 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 16 Understand the principles and applications of human relations in the business setting.

Telecommunications

- 1 Understand the various ways, means and efficiencies of transporting information, whether it be voice, video or data, over distance.
- 2 Assist in the implementation, support and maintenance of Telecommunications Transmission Media, including Cat 1 to Cat 5 wiring, coaxial copper and fiber optic cabling.
- 3 Calculate Signal to Noise Ratios and Propagation characteristics of a given transmission media.
- 4 Understand various methods of Multiplexing.
- 5 Assist in the implementation, support, and maintenance of Public Switched Telephone Network equipment.
- 6 Assist in the implementation, support, and maintenance of Private Branch Exchange equipment.

Division Dsc/Pgm Option # Competencies

- 7 Assist in the implementation, support, and maintenance of Local Exchange Carrier equipment.
- 8 Assist in the implementation, support, and maintenance of Inter Exchange Carrier equipment.
- 9 Assist in the implementation, support, and maintenance of Ethernet, Token Ring, and FDDI networks.
- 10 Assist in the implementation, support, and maintenance of Internet, Frame Relay, and ATM networks.
- 11 Assist in the implementation, support, and maintenance of Customer Premise Connectivity equipment.
- 12 Assist in the implementation, support, and maintenance of Wireless Communications equipment.
- 13 Assist in the implementation, support, and maintenance of Network Switches, Bridges, and Routers.
- 14 Assist in the implementation, support, and maintenance of Digital Subscriber Lines, Integrated Services Digital Network, and Cable Modems.
- 15 Assist in the implementation, support, and maintenance of Fractional T1, T2, and Fractional T3 systems.
- 16 Assist in the implementation, support, and maintenance of TCP/IP networks.
- 17 Assist in the configuration of Frame Relay and Asynchronous Transfer Mode equipment parameters.
- 18 Assist in the configuration of Remote Digital Switching equipment.
- 19 Have advanced understanding of computer hardware and software.
- 20 Have the understanding provided by coursework in Customer Service.
- 21 Calculate network efficiencies.
- 22 Calculate trunk capacities.
- 23 Calculate application throughput.
- 24 Optimize network costs.
- 25 Understand the most pervasive network technologies and their topologies of today's market place.
- 26 Understand the history and regulatory issues of telecommunications firms.
- 27 Have the understanding provided by General Education courses including history, English, political science and mathematics.
- 28 Through various chosen electives, gain knowledge in electronics.
- 29 Through various chosen electives, gain knowledge in accounting, economics, and foreign language.
- 30 Through various chose electives, gain knowledge in computer information systems.
- 31 Have an understanding of Voice Over IP.

Transportation Management

- 1 Apply mathematics fundamentals to business applications such as percentage calculations, simple interest, compound interest, annuities, and payroll.
- 2 Understand the fundamental principles of double entry accounting as applied to practical business situations.
- 3 Understand the steps necessary to start and operate a small business, including the development of a business plan covering forecasting, feasibility, financing, location, legal requirements, financial analysis, and monitoring on-going activities.
- 4 Understand management philosophy and decision-making processes, including principles in the functions of planning, organizing, supervising, and controlling.
- 5 Develop a personal financial plan, including budgeting, borrowing, insurance, investments, taxes, home ownership, and other aspects of personal money management.
- 6 Understand the functioning and current problems of the aggregate economy, including supply and demand, determination and analysis of national income, employment and unemployment, inflation, monetary and fiscal policy, and international trade.

- 7 Understand basic concepts and current trends in the customer service industry, including problem solving, development of a customer service strategy, creating customer service systems, coping with challenging customers, customer retention and measuring satisfaction.
- 8 Demonstrate knowledge of geographical information of the United States, Mexico, and Canada, including map reading and the use of Global Information Systems (GIS), and Global Positioning Systems (GPS).
- 9 Understand the history and culture of the transportation industry, including family considerations, societal image, and personal adjustment.
- 10 Understand cultural and legal issues related to international border crossing.
- 11 Demonstrate knowledge of transportation safety and regulations with emphasis on accident prevention, investigation, and analysis, occupational safety and loss control, and the handling of hazardous materials.
- 12 Understand fundamentals of materials management and physical distribution, including production and inventory control, purchasing, transportation, warehousing and materials handling, order processing, communications, and problems and issues related to logistics.
- 13 Demonstrate knowledge of basic commercial vehicle operations law and driving skills through the attainment of the Commercial Drivers License and driving internship.

COMM

Developmental Studies in Communication

- 1 Effective writing: Use appropriate techniques to communicate ideas in a unified and coherent manner.
- 2 Critical reading: Comprehend readings for community and/or global contexts.
- 3 Informed discussion: Articulate an understanding of a variety of materials.

English

- 1 Effective Writing: Use appropriate techniques to communicate ideas in a unified and coherent manner.
- 2 Critical Reading: Analyze and evaluate increasingly complex readings while considering community and global contexts.
- 3 Informed Discussion: Articulate critical responses to a variety of works.
- 4 Scholarly Research: To present appropriate evidence from primary and secondary sources

International Languages

UP DISCIPLINE GOALS

- 1 Have a measurable proficiency in speaking and listening which is understandable to a native speaker of the target language.
- 2 Have a measurable proficiency of reading non-technical texts in the target language.
- 2 Have a measurable proficiency of writing in the target language.
- 3 Have a measurable understanding of the culture(s) associated with the target language.

WORKFORCE DEVELOPMENT COMPETENCIES

- 1 Communicate orally with native speakers of the target language (French, German, Italian, Japanese, Russian, or Spanish) as an educated speaker.
- 2 Interact with members of the target society (French, German, Italian, Japanese, Russian, or Spanish) on a professional or work-related basis, as well as exhibit sensitivity to the cultural differences and similarities.
- 3 Write the target language (French, German, Italian, Japanese, Russian, or Spanish) so as to communicate with a native speaker on a social or professional level.
- 4 Demonstrate familiarity with common literary samples of the target language (French, German, Italian, Japanese, Russian, or Spanish).

Division Dsc/Pgm Option # Competencies

- 5 Translate basic language samples of the target language (French, German, Italian, Japanese, Russian, or Spanish) to a written form in English that communicates the basic meaning of the original text.
- 6 Distinguish the phonetic differences in the target language (French, German, Italian, Japanese, Russian, or Spanish) which have semantic significance.
- 7 Recognize and respond to idiomatic expressions of the target language (French, German, Italian, Japanese, Russian, or Spanish) with a minimum of difficulty.
- 8 Communicate orally in the target language (French, German, Italian, Japanese, Russian, or Spanish) with fluency and a minimum of hesitancy and intonation, stress or juncture irregularities.
- 9 Read non-technical samples of the target language (French, German, Italian, Japanese, Russian, or Spanish) with comprehension.
- 10 Live and function effectively on daily basis in any of the countries where target language (French, German, Italian, Japanese, Russian, or Spanish) is spoken without an interpreter.
- 11 Comprehend oral language presented in person and through electronic media (telephone, television, radio) for the target language (French, German, Italian, Japanese, Russian, or Spanish).
- 12 Acquire an additional academic skill when all instruction (oral and written) is given in the target language (French, German, Italian, Japanese, Russian, or Spanish).
- 13 Recognize the various social registers of target language (French, German, Italian, Japanese, Russian, or Spanish).
- 14 Recognize and use body language of the target language (French, German, Italian, Japanese, Russian, or Spanish), in a meaningful and natural manner.
- 15 Anticipate the rhetorical patterns of the target culture group (French, German, Italian, Japanese, Russian, or Spanish) with tolerance and understanding.
- 16 Work productively in a country of the culture group (French, German, Italian, Japanese, Russian, or Spanish).
- 17 Acquire an appreciation for the cultural development of the targeted language group (French, German, Italian, Japanese, Russian, or Spanish) while maintaining an affiliation and identity with one's own native culture group (American).
- 18 Demonstrate a familiarity with the arts of the targeted culture group (French, German, Italian, Japanese, Russian, or Spanish). Indicate a familiarity with the government organization and structure of the targeted country.
- 19 Demonstrate knowledge of geographical information for the country (countries) associated with the target language (French, German, Italian, Japanese, Russian, or Spanish).

International Studies

- 1 Identify geographic location and give a summary of the government, social, and economic structures of the country/culture group of focus.
- 2 Identify similarities and differences when comparing their own culture with the global culture of focus.
- 3 Identify examples of literature, music, and/or object of the focused culture.
- 4 Have a measurable proficiency in the international language studied.

Journalism & Mass Communications

- 1 Demonstrated an understanding of basic theory, research and process of journalism and mass communication.
- 2 Gained the ability to apply this knowledge in analyzing and evaluating issues relating to mass media's role in society.
- 3 Demonstrated the ability to write news stories using appropriate media style.
- 4 Demonstrated competence in grammar, spelling and Associated Press Style.

- 5 Gained marketable skills in his or her chosen Journalism/Mass Communication emphasis area (print journalism, broadcast journalism or advertising/public relations).

Speech

- 1 Students will effectively demonstrate skills in organizing and preparing extemporaneous oral presentations.
- 2 Students will demonstrate appropriate skills in delivery of extemporaneous oral presentations.
- 3 Students will demonstrate critical thinking skills through applying knowledge and understand to different contexts, situations and/or specific endeavors.

LIBA

Art

- 1 Ability to work with the tools and techniques.
- 2 Creative thought process.
- 3 Principles of design and composition.
- 4 Exhibit critical thinking.
- 5 Demonstrate computer proficiency as it pertains to subject

Child Development

CENTER DIRECTOR OPTION

- 1 Demonstrate a working knowledge of the theoretical framework and skills which will enable the graduate to obtain a job.
- 2 Understand the impact of sociological, philosophical, and historical underpinnings of child development practices, education, and care.
- 3 Explore current issues and concerns in child development, such as funding, prevalent educational philosophy, multi-culturalism, self-esteem, optimal learning environments, developmentally appropriate materials and child guidance.
- 4 Understand growth patterns and needs of children.
- 5 Effectively communicate with children, parents, and co-workers.
- 6 Recognize characteristics of anti-bias settings and materials to provide children opportunities to learn about and accept all forms of diversity, including gender, race, ability, and cultural areas.
- 7 Demonstrate a wide variety of techniques and organizational skills used to plan appropriate projects and activities for children.
- 8 Recognize signs of child abuse and understand a teacher's legally-mandated responsibility for reporting suspected child abuse cases.
- 9 Be prepared to work with children with special needs and their families by demonstrating the ability to identify characteristics of specific conditions, appropriate environments, and resources.
- 10 Understand the influence of family relationships, culture, and society on the child's development and be able to work with children and families with diverse backgrounds.
- 11 Demonstrate the ability to apply oral and written communication skills.
- 12 Have knowledge of United States history and be familiar with the structure, organization, and function of American government.
- 13 Be familiar with the wide range of career options open to a person with a background in child development.
- 14 Demonstrate knowledge of management techniques and classroom management, as well as appropriate interaction and self-evaluation.

- 15 Demonstrate ability to work in a setting with children, exhibiting appropriate teaching skills, problem-solving skills, and time management, as well as appropriate interaction and self-evaluation.
- 16 Demonstrate ability to recognize potential safety hazards to children, various childhood diseases and causative factors, and means of transmission and prevention.
- 17 Demonstrate knowledge of first aid skills, including cardiopulmonary resuscitation, emergency care of most common acute illnesses and/or accidents (bleeding, poisoning, and choking).
- 18 Understand basic problems and principles of human experience and behavior.
- 19 Be familiar with local, state, and national professional affiliations, and exhibit professionalism and ethical practice as recommended by recognized professional organizations.
- 20 Upon choosing the Child Director option, demonstrate basic principles necessary for managing a small business.
- 21 Be familiar with state childcare licensing requirements.
- 22 Upon completion of the Center Director option, students will be prepared to manage a child care center / program.

CHILD DEVELOPMENT CREDENTIAL PREPARATION (CDA) CERTIFICATE

- 1 Demonstrate the skills needed to work in a child-related setting including but not limited to child care centers, preschools, public schools, Head Starts, or family day care homes.
- 2 Effectively communicate with the children, their parents, and co-workers.
- 3 Understand growth and development patterns of children.
- 4 Plan and implement developmentally appropriate projects and activities for children.
- 5 Recognize signs of child abuse and understand the teacher's legally mandated responsibility in reporting suspected child abuse cases.
- 6 Explore childhood concerns such as self-esteem, optimal learning environments, developmentally appropriate materials, and guidance of young children.
- 7 Recognize characteristics of anti-bias settings and materials to provide children opportunities to learn about and accept all forms of diversity, including gender, race, ability, and cultural area.
- 8 Be prepared to work with children with special needs and their families by demonstrating the ability to identify characteristics of specific conditions, appropriate environments, and resources.
- 9 Understand the influence of family relationships and parenting on the child's development.
- 10 Demonstrate the ability to apply oral and written communication skills.
- 11 Demonstrate ability to work in a setting with children, exhibiting appropriate teaching skills, problem-solving skills, and time management, as well as appropriate interaction and self-evaluation.
- 12 Demonstrate ability to recognize potential safety hazards to children and implement safe play and learning environments.
- 13 Understand the impact of sociological, philosophical, and historical underpinnings of early childhood practices, education, and care.
- 14 Explore current issues in childcare, such as funding, prevalent educational philosophies, infant care, school-age childcare, multiculturalism, and discipline.
- 15 Understand the structure of a child care program and the roles and responsibilities of all its workers.
- 16 Demonstrate awareness of the techniques and concepts of administration and management in an early childhood setting.
- 17 Be familiar with state childcare licensing requirements.
- 18 Upon completion of the Child Development Credential Preparation option, students will be prepared to begin the assessment and testing process for the CDA administered by the Council for Early Childhood Professional Recognition.

EARLY CHILDHOOD OPTION

Division Dsc/Pgm Option # Competencies

- 1 Demonstrate a working knowledge of the theoretical framework and skills which will enable the graduate to begin a career.
- 2 Exhibit an understanding of the impact of sociological, philosophical, and historical underpinnings of child development practices, education, and care
- 3 Explore current issues and concerns in child development, such as but not limited to funding, prevalent educational philosophy, multi-culturalism, self-esteem, optimal learning environments, developmentally appropriate materials, and child guidance.
- 4 Demonstrate an understanding of growth patterns and needs of children ages birth to eight.
- 5 Effectively communicate, both orally and in written format, with children, parents, co-workers, and the community.
- 6 Recognize characteristics of anti-bias settings and materials to provide children opportunities to learn about and accept all forms of diversity, including gender, race, ability, cultural areas, age, and family style.
- 7 Demonstrate a wide variety of techniques and organizational skills used to plan appropriate projects and activities for children.
- 8 Recognize signs of child abuse and understand a teacher's legally mandated responsibility for reporting suspected child abuse cases.
- 9 Work with children with special needs and their families by demonstrating the ability to identify characteristics of specific conditions, appropriate environments, and resources.
- 10 Demonstrate an understanding of the influence of family relationships, culture, and society on the child's development and be able to work with children and families with diverse backgrounds using a family systems approach.
- 11 Be familiar with United States history and the structure, organization, and function of American government to cultivate advocacy efforts.
- 12 Be familiar with the wide range of career options open to a person with a background in child development and have a clear understanding of the career ladder.
- 13 Demonstrate knowledge of teaching techniques and classroom management as well as appropriate interaction.
- 14 Demonstrate ability to work in a setting with children, exhibiting stage-appropriate teaching skills, problem-solving skills, and time management.
- 15 Recognize the importance of and possess the tools for self-evaluation and reflective practice as it relates to professional development and growth.
- 16 Demonstrate ability to recognize potential safety hazards to children, various childhood diseases and causative factors, and means of transmission and prevention.
- 17 Demonstrate knowledge of first aid skills, including cardiopulmonary resuscitation, emergency care of most common acute illnesses and/or accidents (bleeding, poisoning, and choking).
- 18 Be familiar with local, state, and national professional affiliations, and exhibit professionalism and ethical practice as recommended by recognized professional organizations.
- 19 Demonstrate a working knowledge of curriculum development and implementation including developmentally appropriate practices, emergent literacy, webbing, and other techniques that address the developmental needs of the whole child.
- 20 Understand the various roles of early childhood professionals in the early childhood classroom/child care program.
- 21 Upon completion of the Early Childhood option, students will be prepared to work in programs serving children from birth to age eight.
- 22 Expand knowledge and skill base through personal and professional growth and development.
- 23 Be familiar with the various used of technology as it relates to the early childhood profession.

HEAD START CREDENTIAL

- 1 Demonstrate a working knowledge and skills relevant to working with Head Start families which will enable the graduate to obtain a job with a Head Start Program as a Head Start Family Worker.

- 2 Demonstrate knowledge and understanding of the impact of sociological, philosophical, and historical underpinnings of the Head Start Program.
- 3 Demonstrate knowledge and understanding of current issues and concerns relevant to Head Start Programs and the children and families they serve.
- 4 Demonstrate a working knowledge and skills for the development of positive and beneficial relationships with Head Start families.
- 5 Demonstrate a working knowledge of literacy and Head Start literacy goals.
- 6 Demonstrate effective oral and written communication abilities.
- 7 Demonstrate an understanding, appreciation, respect, and skill for the development of positive, ongoing partnerships with Head Start families from a wide range of multicultural backgrounds.
- 8 Demonstrate knowledge, understanding, awareness, and skills for identifying community resources and for assisting Head Start families to access these services.
- 9 Demonstrate knowledge, skills, understanding, and willingness to facilitate Head Start parents' involvement in Head Start Programs serving their children.
- 10 Demonstrate knowledge, understanding, and skill in implementing Head Start Standards as they relate to services for Head Start families and children.
- 11 Upon completion of the Head Start Credential Certificate of achievement be prepared to apply for the Head Start Family Worker Credential.

INFANT-TODDLER CERTIFICATE OF MASTERY

- 1 Demonstrate a working knowledge of the theoretical framework and skills relevant to the development and care of infants and toddlers which will enable the graduate to obtain a job in the field of infant-toddler care.
- 2 Demonstrate knowledge and understanding of the impact of sociological, philosophical, and historical underpinnings of infant-toddler developmental practices, early education, and care.
- 3 Demonstrate knowledge and understanding of current issues and concerns in the field of infant-toddler early education and care, such as funding, prevalent educational theory and philosophy, multi-cultural differences in infant-toddler care, family systems, trust and attachment, self-esteem and self awareness, brain and cognitive development, language and literacy, enriched learning environments, developmentally appropriate practices, and professionalism and ethical behavior.
- 4 Demonstrate a working knowledge of the growth patterns and needs of infants and toddlers.
- 5 Demonstrate effective oral and written communication abilities.
- 6 Recognize and understand the characteristics of anti-bias settings and materials that show respect and understanding of multicultural diversity including gender, age, race, country of origin, ability, and culture.
- 7 Demonstrate knowledge and understanding of a wide variety of techniques and organizational skills used to plan appropriate care, early education, and enrichment activities for infants and toddlers.
- 8 Recognize and understand signs of child abuse and neglect; and, understand his/her legally-mandated responsibility to report suspected child abuse and neglect cases.
- 9 Demonstrate knowledge, skills, understanding, and willingness for the inclusion of infants and toddlers with special needs in programs serving young children.
- 10 Demonstrate knowledge and understanding of the influence of family relationships, culture, and society on the development of infants and toddlers.
- 11 Demonstrate knowledge and understanding of the United States and be familiar with the structure, organization, and function of American government.
- 12 Demonstrate awareness of the range of career options available to a person with knowledge and training in infant-toddler care and early education.
- 13 Demonstrate knowledge and skills to recognize potential safety and health hazards diseases to infants and toddlers.
- 14 Demonstrate knowledge and skills of first aid, including cardiopulmonary resuscitation, emergency care of most common acute illnesses and/or accidents such as bleeding, poisoning, and choking.

- 15 Demonstrate knowledge of and membership in local, state, and national professional affiliations, and exhibit professionalism and ethical practice as determined and recognized by professional organizations.
- 16 Demonstrate knowledge and understanding of state childcare licensing requirements and NAEYC accreditation standards.
- 17 Upon completion of the Infant-Toddler option, graduates will be prepared to provide early care and education in programs serving infants and toddlers.

INFANT-TODDLER OPTION

- 1 Demonstrate a working knowledge of the theoretical framework and skills relevant to the development and care of infants and toddlers which will enable the graduate to obtain a job in the field of infant-toddler care.
- 2 Demonstrate knowledge and understanding of the impact of sociological, philosophical, and historical underpinnings of infant-toddler developmental practices, early education, and care.
- 3 Demonstrate knowledge and understanding of current issues and concerns in the field of infant-toddler early education and care, such as funding, prevalent educational theory and philosophy, multi-cultural differences in infant-toddler care, family systems, trust and attachment, self-esteem and self awareness, brain and cognitive development, language and literacy, enriched learning environments, developmentally appropriate practices, and professionalism and ethical behavior.
- 4 Demonstrate a working knowledge of the growth patterns and needs of infants and toddlers.
- 5 Demonstrate effective oral and written communication abilities.
- 6 Recognize and understand the characteristics of anti-bias settings and materials that show respect and understanding of multicultural diversity including gender, age, race, country of origin, ability, and culture.
- 7 Demonstrate knowledge and understanding of a wide variety of techniques and organizational skills used to plan appropriate care, early education, and enrichment activities for infants and toddlers.
- 8 Recognize and understand signs of child abuse and neglect; and, understand his/her legally-mandated responsibility to report suspected child abuse and neglect cases.
- 9 Demonstrate knowledge, skills, understanding, and willingness for the inclusion of infants and toddlers with special needs in programs serving young children.
- 10 Demonstrate knowledge and understanding of the influence of family relationships, culture, and society on the development of infants and toddlers.
- 11 Demonstrate knowledge and understanding of the United States and be familiar with the structure, organization, and function of American government.
- 12 Demonstrate awareness of the range of career options available to a person with knowledge and training in infant-toddler care and early education.
- 13 Demonstrate knowledge and skills to recognize potential safety and health hazards diseases to infants and toddlers.
- 14 Demonstrate knowledge and skills of first aid, including cardiopulmonary resuscitation, emergency care of most common acute illnesses and/or accidents such as bleeding, poisoning, and choking.
- 15 Demonstrate knowledge of and membership in local, state, and national professional affiliations, and exhibit professionalism and ethical practice as determined and recognized by professional organizations.
- 16 Demonstrate knowledge and understanding of state childcare licensing requirements and NAEYC accreditation standards.
- 17 Upon completion of the Infant-Toddler option, graduates will be prepared to provide early care and education in programs serving infants and toddlers.

MIDDLE CHILDHOOD OPTION

- 1 Demonstrate a working knowledge of the theoretical framework and skills which will enable the graduate to obtain a job.
- 2 Understand the impact of sociological, philosophical, and historical underpinnings of child development practices, education, and care.
- 3 Explore current issues and concerns in child development, such as funding, prevalent educational philosophy, multi-culturalism, self-esteem, optimal learning environments, developmentally appropriate materials and child guidance.

Division Dsc/Pgm Option # Competencies

- 4 Understand growth patterns and needs of children.
- 5 Communicate effectively with children, parents, and co-workers.
- 6 Recognize characteristics of anti-bias settings and materials to provide children opportunities to learn about and accept all forms of diversity, including gender, race, ability, and cultural areas.
- 7 Demonstrate a wide variety of techniques and organizational skills used to plan appropriate projects and activities for children.
- 8 Recognize signs of child abuse and understand a teacher's legally mandated responsibility for reporting suspected child abuse cases.
- 9 Be prepared to work with children with special needs and their families by demonstrating the ability to identify characteristics of specific conditions, appropriate environments, and resources.
- 10 Understand the influence of family relationships, culture, and society on the child's development and be able to work with children and families with diverse backgrounds.
- 11 Demonstrate the ability to apply oral and written communication skills.
- 12 Have knowledge of U. S. history, be familiar with the structure, organization, and function of American government.
- 13 Be familiar with the wide range of career options open to a person with a background in child development.
- 14 Demonstrate knowledge of teaching techniques and classroom management, as well as, appropriate interaction and self-evaluation.
- 15 Demonstrate ability to work in a setting with children, exhibiting appropriate teaching skills, problem-solving skills, and time management, as well as appropriate interaction and self-evaluation.
- 16 Demonstrate ability to recognize potential safety hazards to children, various childhood diseases and causative factors, and means of transmission and prevention.
- 17 Demonstrate knowledge of first aid skills, including cardiopulmonary resuscitation, emergency care of most common acute illnesses and/or accidents (bleeding, poisoning, and choking).
- 18 Understand basic problems and principles of human experience and behavior.
- 19 Be familiar with local, state, and national professional affiliations, and exhibit professionalism and ethical practice as recommended by recognized professional organizations.
- 20 Upon completion of the Middle Childhood option, students will be prepared to work in programs serving school age children.

PROFESSIONAL NANNY CERTIFICATE

- 1 Demonstrate the skills needed to provide childcare in a private home.
- 2 Effectively communicate with children and their parents.
- 3 Understand growth and development patterns of children.
- 4 Plan and implement developmentally appropriate enrichment activities for children.
- 5 Recognize signs of child abuse and understand their legally mandated responsibility in reporting suspected cases of abuse.
- 6 Demonstrate knowledge and effectively implement constructive techniques that promote optimal child development, learning environments, positive self-concept and self-esteem, and guidance of young children.
- 7 Provide anti-bias settings and materials to provide children opportunities to learn about and accept all forms of diversity, including gender, race, ability, and culture.
- 8 Effectively work with special needs children and their families by providing developmentally appropriate environments, resources, guidance, and enrichment.
- 9 Understand the influence of community, family relationships and parenting on the child's development.
- 10 Demonstrate the ability to apply oral and written communication skills.
- 11 Exhibit time management, problem solving, supervision, and teaching skills for working with children in a private home.

- 12 Demonstrate ability to recognize and address potential safety hazards, cleanliness and health risks to children.
- 13 Understand the impact of sociological, philosophical and historical significance of early childhood practices, education, and care.
- 14 Demonstrate knowledge of first aid skills, including cardiopulmonary resuscitation, emergency care of most common acute illnesses and/or accidents (bleeding, choking, and poisoning).
- 15 Explore current issues in child development and care including multiculturalism, infant/toddler care, and guidance.
- 16 Understand the family, parenting, and the role of the Professional Nanny.
- 17 Demonstrate the techniques needed for personal development including writing resumes, interviewing, negotiating contracts, personal safety, and time and stress management.
- 18 Upon completion of the Professional Nanny Option, students will be prepared to work as nannies in private homes.

RESIDENTIAL CHILD AND YOUTH WORKER CERTIFICATE

- 1 Demonstrate the skills needed to provide care to children in residential group settings.
- 2 Effectively communicate with children, co-workers, parents, and others.
- 3 Understand growth and development patterns of children and youth.
- 4 Plan and implement developmentally appropriate enrichment activities for children and youth.
- 5 Demonstrate knowledge of the dynamics of child abuse and neglect as a basis for understanding children in residential care.
- 6 Effectively implement constructivist techniques that promote optimal child development, learning environments, positive self-concept and self-esteem, and guidance of children and youth.
- 7 Provide anti-bias settings and materials to provide children opportunities to learn about and accept all forms of diversity: gender, race, ability, and culture.
- 8 Effectively work with special needs children by providing developmentally appropriate environments, resources, guidance, and enrichment.
- 9 Understand the influences of community, family relationships and parenting on the child's development.
- 10 Demonstrate the ability to apply oral and written communication skills.
- 11 Exhibit time management, problem solving, supervision, and teaching skills for working with children and youth in a residential group setting.
- 12 Demonstrate ability to recognize and address potential safety hazards, cleanliness and health risks to children and youth.
- 13 Understand the impact of sociological, philosophical and historical significance of residential childcare practices.
- 14 Explore current issues in child and youth development and residential care including multiculturalism, care of young children, life skills for youth, leisure time, and guidance techniques.
- 15 Understand children, families, and the role of residential group care.
- 16 Demonstrate the techniques needed for management including supervisory skills, administration strategies, program evaluation, managed care, record keeping and documentation.
- 17 Upon completion of the Residential Child Care option, students will be prepared to provide residential group care to children and youth.

SCHOOL-AGE CERTIFICATE and CERTIFICATE OF MASTERY

- 1 Demonstrate the skills needed to maintain indoor and outdoor environments for school-age children that promote wellness, reduce and prevent diseases, injuries and accidents.
- 2 Effectively promote, reinforce, and encourage the physical development of school-age children through age and stage developmentally appropriate environments, activities, and interactions.
- 3 Provide environments that encourage children to develop and use communication skills including expression of ideas and feelings.

Division Dsc/Pgm Option # Competencies

- 4 Provide opportunities for children to explore, experiment, and to build on their natural curiosity and creativity.
- 5 Demonstrate the ability to develop positive, supportive relationships with children and families.
- 6 Encourage and help children to understand and respect the feelings of others, and to develop friendships, social skills, and positive peer interactions.
- 7 Communicate with parents and to plan and facilitate ways for parents to participate and have input into school-age programs their children attend.
- 8 Accurately observe, record, and interpret growth and developmental information about school-age children.
- 9 Provide homework and literacy support for children in school-age programs.
- 10 Effectively administer a school-age program.

TEACHER ASSISTANT CERTIFICATE

- 1 Demonstrate a working knowledge and skills for work in a public school classroom as an assistant to a certified teacher.
- 2 Demonstrate a working knowledge of the growth patterns, learning styles, and needs of children.
- 3 Recognize and understand the characteristics of anti-bias settings and materials that show respect and understanding of multicultural diversity including gender, age, race, country of origin, ability, and culture.
- 4 Demonstrate knowledge and understanding of a wide variety of techniques and organizational skills used to assist in the planning of appropriate activities and learning experiences for children in a classroom setting.
- 5 Recognize and understand signs of child abuse and neglect; and, understand his/her legally-mandated responsibility to report suspected child abuse and neglect cases.
- 6 Demonstrate knowledge, skills, understanding, and willingness for the inclusion of children with special needs in programs serving young children. Demonstrate knowledge and understanding of the influence of family relationships, culture, and society on the development and education of school age children.
- 7 Upon completion of the Teacher Assistant certificate, graduates will be prepared to work in a classroom setting with a certified public school teacher.

TEACHER ASSISTANT OPTION

- 1 Demonstrate a working knowledge and skills for work in a public school classroom as an assistant to a certified teacher.
- 2 Demonstrate knowledge and understanding of the impact of sociological, philosophical, and historical underpinnings of public education and programs serving children.
- 3 Demonstrate knowledge and understanding of current issues and concerns in the area of public schools such as funding, prevalent educational theory and philosophy, multi-cultural awareness, literacy, and technology in the classroom.
- 4 Demonstrate a working knowledge of the growth patterns, learning styles, and needs of children.
- 5 Demonstrate effective oral and written communication abilities.
- 6 Recognize and understand the characteristics of anti-bias settings and materials that show respect and understanding of multicultural diversity including gender, age, race, country of origin, ability, and culture.
- 7 Demonstrate knowledge and understanding of a wide variety of techniques and organizational skills used to assist in the planning of appropriate activities and learning experiences for children in a classroom setting.
- 8 Recognize and understand signs of child abuse and neglect; and, understand his/her legally-mandated responsibility to report suspected child abuse and neglect cases.
- 9 Demonstrate knowledge, skills, understanding, and willingness for the inclusion of children with special needs in programs serving young children.
- 10 Demonstrate knowledge and understanding of the influence of family relationships, culture, and society on the development and education of school age children.
- 11 Demonstrate knowledge of and membership in local, state, and national professional affiliations, and exhibit professionalism and ethical practice as determined and recognized by professional organizations.

- 12 Demonstrate knowledge and understanding of the United States and be familiar with the structure, organization, and function of American government.
- 13 Upon completion of the Teacher Assistant graduates will be prepared to work in a classroom setting with a certified public school teacher.

Developmental Studies in Communication

- 1 Effective writing: Use appropriate techniques to communicate ideas in a unified and coherent manner.
- 2 Critical reading: Comprehend readings for community and/or global contexts.
- 3 Informed discussion: Articulate an understanding of a variety of materials.

Emergency Medical Technology

- 1 Complete pre-hospital environmental procedures.
- 2 Demonstrate preparatory procedures.
- 3 Demonstrate trauma emergency procedures.
- 4 Perform medical emergency care.
- 5 Perform OB/GYN/Neonatal emergency care.
- 6 Perform psychiatric emergency care.

English

- 1 Effective Writing: Use appropriate techniques to communicate ideas in a unified and coherent manner.
- 2 Critical Reading: Analyze and evaluate increasingly complex readings while considering community and global contexts.
- 3 Informed Discussion: Articulate critical responses to a variety of works.
- 4 Scholarly Research: To present appropriate evidence from primary and secondary sources

English as a Second Language

- 1 Identify the main idea in a reading passage
- 2 Identify the important information in a listening passage
- 3 Recognize influences in American culture
- 4 Make an argument for a point of view

Fire and Emergency Services Technology

- 1 Make effective public fire safety education presentations.
- 2 Conduct fire safety inspections for fire prevention purposes.
- 3 Recognize potential fire problems related to building construction.
- 4 Assess a building's overall fire safety while conducting a prefire planning or familiarization inspection.
- 5 Demonstrate familiarity with proper procedures for conducting fire investigations to determine cause and origin.
- 6 Assist in fire investigations.

- 7 Operate effectively within a recognized emergency management system.
- 8 Assess a building's ability to maintain structural integrity when exposed to a serious fire.
- 9 Demonstrate familiarity with a wide variety of fixed fire protection systems.
- 10 Demonstrate a basic understanding of the hazards associated with many materials, systems, and processes.
- 11 Apply principles of supervisory and administrative leadership in the fire and emergency services.
- 12 Effectively communicate with governmental agencies and the public. Understand the application of hydraulic principles in fixed and portable water distribution systems.

Geography

- 1 Students will display a capability to define patterns and processes ("what") of various geographic phenomena.
- 2 Students through use of mapping techniques will apply geographic insight to show location and distribution ("where") of geographic phenomena
- 3 Students by application of gained knowledge from text, lecture, and other technologies will explain phenomena location ("why") in a manner that displays knowledge of cultural and natural factors and processes responsible.
- 4 Students by answering well framed test questions, given as objective or essays, will manifest a clear ability to critical think.

Geology

- 1 Be able to identify and explain geologic phenomena.
- 2 Be able to locate the phenomena relative to the process of cause.
- 3 Be able to explain geologic phenomena in terms of the natural forces or process responsible for existence.
- 4 Be able to place geologic phenomena into the chronology of Earth's geological history.

History

- 1 In the discipline of history, the students will demonstrate an adequate use of historical reasoning or critical thinking skills.
- 2 In the discipline of history, the students will demonstrate an adequate use of effective communication skills.
- 3 For a given period in history, the students will demonstrate an adequate knowledge of the significant events, ideas, behaviors and institutions that make up the historical process.

Human Services

- 1 Understand the theoretical and practical approaches utilized by various human service agencies.
- 2 Understand and apply psychological, sociological, and ethical principles to client situations.
- 3 Implement/evaluate program-based client needs assessment.
- 4 Use knowledge of community resources to meet client needs.
- 5 Understand characteristics/interpersonal dynamics unique to chemical dependency and methods for intervention.
- 6 Effectively communicate using verbal and nonverbal skills with individuals and groups.
- 7 Participate with co-workers, superiors, and outside agencies in reviewing/developing policies and procedures.
- 8 Demonstrate ability to provide appropriate intervention in crisis situations.

- 9 Use case management skills conforming to program procedures.
- 10 Explore current human services issues and trends and demonstrate ability to address solutions to problems and barrier services.
- 11 Use skills appropriate to specific internship experience.
- 12 Act in professional/ethical manner in carrying out duties.
- 13 Demonstrate knowledge and application of principles pertinent to chosen area in developmental disabilities, gerontology, child services, therapeutic recreation, corrections, or community services management.
- 14 Have ability to apply oral\written communication skills.
- 15 Have knowledge of United States history.
- 16 Be familiar with structure, organization, and function of United States government.
- 17 Understand basic problems and principles of human experience and behavior.
- 18 Have a basic understanding of counseling skills.
- 19 Demonstrate working knowledge of computers.
- 20 Be familiar with various services and interaction of agencies within the federal, state, county, and city government.
- 21 Explore and refine career interests early in the academic program through career self-reflection, assessment, and exposure to career opportunities.

Humanities

- 1 Analyze a specific creative form of expression
- 2 Demonstrate relationships among the arts, society and its cultural context.
- 3 Articulate the relevance to their lives of concepts and/or values found in the Humanities.

International Languages

UP DISCIPLINE GOALS

- 1 Have a measurable proficiency in speaking and listening which is understandable to a native speaker of the target language.
- 2 Have a measurable proficiency of writing in the target language.
- 2 Have a measurable proficiency of reading non-technical texts in the target language.
- 3 Have a measurable understanding of the culture(s) associated with the target language.

WORKFORCE DEVELOPMENT COMPETENCIES

- 1 Communicate orally with native speakers of the target language (French, German, Italian, Japanese, Russian, or Spanish) as an educated speaker.
- 2 Interact with members of the target society (French, German, Italian, Japanese, Russian, or Spanish) on a professional or work-related basis, as well as exhibit sensitivity to the cultural differences and similarities.
- 3 Write the target language (French, German, Italian, Japanese, Russian, or Spanish) so as to communicate with a native speaker on a social or professional level.
- 4 Demonstrate familiarity with common literary samples of the target language (French, German, Italian, Japanese, Russian, or Spanish).
- 5 Translate basic language samples of the target language (French, German, Italian, Japanese, Russian, or Spanish) to a written form in English that communicates the basic meaning of the original text.
- 6 Distinguish the phonetic differences in the target language (French, German, Italian, Japanese, Russian, or Spanish) which have semantic significance.

Division Dsc/Pgm Option # Competencies

- 7 Recognize and respond to idiomatic expressions of the target language (French, German, Italian, Japanese, Russian, or Spanish) with a minimum of difficulty.
- 8 Communicate orally in the target language (French, German, Italian, Japanese, Russian, or Spanish) with fluency and a minimum of hesitancy and intonation, stress or juncture irregularities.
- 9 Read non-technical samples of the target language (French, German, Italian, Japanese, Russian, or Spanish) with comprehension.
- 10 Live and function effectively on daily basis in any of the countries where target language (French, German, Italian, Japanese, Russian, or Spanish) is spoken without an interpreter.
- 11 Comprehend oral language presented in person and through electronic media (telephone, television, radio) for the target language (French, German, Italian, Japanese, Russian, or Spanish).
- 12 Acquire an additional academic skill when all instruction (oral and written) is given in the target language (French, German, Italian, Japanese, Russian, or Spanish).
- 13 Recognize the various social registers of target language (French, German, Italian, Japanese, Russian, or Spanish).
- 14 Recognize and use body language of the target language (French, German, Italian, Japanese, Russian, or Spanish), in a meaningful and natural manner.
- 15 Anticipate the rhetorical patterns of the target culture group (French, German, Italian, Japanese, Russian, or Spanish) with tolerance and understanding.
- 16 Work productively in a country of the culture group (French, German, Italian, Japanese, Russian, or Spanish).
- 17 Acquire an appreciation for the cultural development of the targeted language group (French, German, Italian, Japanese, Russian, or Spanish) while maintaining an affiliation and identity with one's own native culture group (American).
- 18 Demonstrate a familiarity with the arts of the targeted culture group (French, German, Italian, Japanese, Russian, or Spanish). Indicate a familiarity with the government organization and structure of the targeted country.
- 19 Demonstrate knowledge of geographical information for the country (countries) associated with the target language (French, German, Italian, Japanese, Russian, or Spanish).

International Studies

- 1 Identify geographic location and give a summary of the government, social, and economic structures of the country/culture group of focus.
- 2 Identify similarities and differences when comparing their own culture with the global culture of focus.
- 3 Identify examples of literature, music, and/or object of the focused culture.
- 4 Have a measurable proficiency in the international language studied.

Interpreter Education

- 1 Demonstrate the ability to use and read American Sign Language including grammar, syntax, idioms, and colloquialisms.
- 2 Demonstrate the ability to use and read manually coded English within the interpreting classes.
- 3 Demonstrate the ability to interpret/translate voice-to-sign and sign-to-voice.
- 4 Demonstrate the ability to use and read signs and finger spelling at an appropriate rate.
- 5 Demonstrate the ability to read body language, gestures, and ideographic signs.
- 6 Recognize and demonstrate types of communication styles and modes preferred by persons who are Deaf/hard of hearing.
- 7 Understand and respect the culture of persons who are deaf.

Division Dsc/Pgm Option # Competencies

- 8 Understand the educational background of persons who are deaf or hard of hearing.
- 9 Identify organizations, services, and publications in the Deaf community.
- 10 Compare and contrast the two models of deafness.
- 11 Demonstrate the ability to identify effects of deafness on language, intellectual, personal, vocational, social, and educational development.
- 12 Demonstrate the techniques used for medical, legal, business/professional, religious, educational, platform, oral, and artistic interpreting; and interpreting for persons who are Deaf-Blind, and those who possess minimal language skills.
- 13 Understand the theories, guidelines, principles and practices of interpreting and translating.
- 14 Understand and practice the Registry of Interpreters for the Deaf Code of Ethics and the Quality Assurance Screening Test Code of Ethics.
- 15 Demonstrate the ability to apply oral and written communication skills.
- 16 Be familiar with the basic principles of American history.
- 17 Effectively communicate using verbal and nonverbal skills with individuals and groups.
- 18 Practice human relations skills that promote positive, effective interaction with others.
- 19 Understand the basic overview of American Government.
- 20 Identify assistive technology used in communicating with persons who are deaf or hard of hearing.
- 21 Communicate information in a complete, logical, clear and concise written format to appropriate agency and/or person.
- 22 Understand and apply psychological and sociological principles to interactions with individuals and groups.

Law Enforcement

COLLEGIATE OFFICER OPTION

- 1 Recognize the development, general purpose, and functions of various agencies within the criminal justice system.
- 2 Define a crime, recognize elements of major statutory offenses, their corpus delicti, classify (apply Oklahoma law) the offense as either a felony or misdemeanor and recognize some potential defenses to criminal conduct.
- 3 Differentiate between conditions permitting an arrest without a warrant and those requiring an arrest warrant, and understand the general method to secure a proper arrest and/or search warrant.
- 4 Recognize and identify circumstances and/or conditions, which might permit a search incident to an arrest, search by consent, and search of a motor vehicle within the guidelines set forth by the U.S. Supreme Court.
- 5 Demonstrate a basic working knowledge of the general rules of evidence, knowledge of the various types of evidence and their admissibility. The student should recognize the potential data, which might be secured by a criminalistic examination of items at a crime scene and the proper method of preserving these items for laboratory analysis.
- 6 The student will demonstrate competency in standard first aid of the American Red Cross with special emphasis on resuscitation, control of bleeding and shock, poisons, choking, and transportation of injured persons and will be certified on CPR through the American Heart Association and/or American Red Cross.
- 7 The student will demonstrate a general knowledge and proficiency of psychomotor skills necessary to meet the anticipated fundamental demands of law enforcement in safety, nomenclature, maintenance, range safety, and shooting fundamentals regarding a handgun and police type shotgun. While participating with an interactive visual and psychomotor firearms training system, such as FATS, the student will demonstrate the use of command presence and control, body positioning, weapons safety and control, and the appropriate use of concealment/cover and exhibit correct decisions on whether or not to use deadly force during training scenarios in accordance with CLEET, state and federal standards.

- 8 The student will develop a functional level of knowledge and skill in the area of arrest/handcuffing, weaponless self-defense, intermediate weapons control and weapon retention. The student will be familiar and demonstrate competency in the Oklahoma Custody and Control System and the necessary attitudes, knowledge and psychomotor skills to avoid use of excessive force and/or unnecessary deadly force in accordance with CLEET, state and federal standards.
- 9 The student will acquire knowledge of the legal aspects of law enforcement driving and will acquire knowledge of desirable law enforcement driving behaviors. The student will acquire the knowledge and skills unique to the handling of a vehicle in non-emergency mode, emergency mode, and pursuit mode.

GENERAL OPTION

- 1 Recognize the development, general purpose, and functions of various agencies within the criminal justice system.
- 2 Define a crime, recognizing elements of major statutory offenses, their corpus delicti, classifying (apply Oklahoma law) the offenses as either a felony or misdemeanor and recognizing some potential defenses to criminal conduct.
- 3 Differentiate between conditions permitting an arrest without warrant and those requiring an arrest warrant, and an understanding of the general method to secure a proper arrest and/or search warrant.
- 4 Recognize and identify circumstances and/or conditions, which might permit a search incident to an arrest, search by consent, and search of a motor vehicle within the guidelines set forth by the U.S. Supreme Court.
- 5 Demonstrate a basic working knowledge of the general rules of evidence, knowledge of the various types of evidence and their admissibility. The student should recognize the potential data, which might be secured by a criminalistic examination of items at a crime scene and the proper method of preserving these items for laboratory analysis.
- 6 Communicate information in a complete, logical, clear, and concise written format to appropriate agency and/or person.
- 7 Understand overall workings of the criminal justice field.
- 8 Understand basic common law and statutory criminal law.
- 9 Understand the basic subjects necessary to perform as law enforcement agents in such areas as criminal investigation, and to understand civil rights and liberties.
- 10 Demonstrate the ability to apply oral and written communication skills.
- 11 Be familiar with the basic principles of American history.
- 12 Effectively communicate using verbal and nonverbal skills with individuals and groups.
- 13 Understand and apply psychological and sociological principles to law enforcement situations.
- 14 Develop a working knowledge of basic skills with computers.

Music

- 1 Transfer to a 4-year university and enroll in 3000 & 4000 level courses without remediation.
- 2 Progress at the appropriate level in the applied music lessons
- 3 Understand the history of music as it relates to theory and performance practice.
- 4 Participate in appropriate music ensembles.
- 5 Interpret and analyze the music student performs or hears, theoretically and historically.

Philosophy

- 1 Critical thinking about philosophy and philosophic problems
- 2 An understanding of what philosophy and philosophic problems are
- 3 An ability to engage in rational and civil discourse

4 A historic knowledge of important persons and issues in philosophy

Political Science

- 1 The students will demonstrate the ability to make inference based on observation
 - 2 The students will explain definitions of civic responsibility in a democratic republic.
 - 3 The students will make apparent salient knowledge of past and current economic influences, political arrangements, and social processes.
-

Psychology

- 1 Students will develop an understanding of core psychological concepts and theories, as well as the scientific study of behavioral and mental processes.
 - 2 Students will develop an understanding of the relationship between psychological studies and how research findings can be applied to human concerns.
 - 3 Students will utilize critical thinking in evaluating psychological theories and research evidence.
-

Religious Studies

- 1 Knowledge of the interrelationship between religions and societies
 - 2 Civil discourse on the topics presented in religious studies
 - 3 Use of vocabulary proper to religious studies
 - 4 Appreciation for religious issues, ideas, and/or values
-

Sociology

- 1 Demonstrate mastery of selected sociological concepts and principles.
 - 2 Discuss the history of and/or major contributors to the discipline.
 - 3 Distinguish between the major theoretical perspectives and use them to analyze specific social situations.
 - 4 Employ the sociological imagination to examine the interplay among history, culture, and personal biography.
-

Speech

- 1 Students will effectively demonstrate skills in organizing and preparing extemporaneous oral presentations.
 - 2 Students will demonstrate appropriate skills in delivery of extemporaneous oral presentations.
 - 3 Students will demonstrate critical thinking skills through applying knowledge and understand to different contexts, situations and/or specific endeavors.
-

NURS

Geriatric Technician

- 1 Understand the general theory and application of: The aging process and basic gerontologic nursing concepts, principles of restorative care, the concept of person-centered care, medical terminology and healthcare abbreviations, common diseases and disorders of the older adult, principles of asepsis, basic human needs of the older adult, legal and ethical issues, elder abuse, end-of-life care and the care of the caregiver.

- 2 Understand the theory and application of basic gerontologic nursing standards of care, state and federal regulations in the care of older adults, the Omnibus Reconciliation Act (OBRA) of 1987, Resident's Bill of Rights and the basics of the nursing process related to the client's individualized plan of care.
- 3 Understand the general theory and application of team work: assertive communication, communication with difficult clients and colleagues, cultural diversity, conflict management, group process and basic leadership concepts.
- 4 Understand the general theory and application of the care of individuals with Alzheimer's disease and other related dementias and working with the families and other caregivers caring for individuals with dementia.
- 5 Perform the skills competencies required for this course: Personal care/bathing, dressing, oral hygiene, A.M. care, bedmaking, vital signs, restorative care including transfer and ambulation, range of motion, basic nutritional care/feeding, medical asepsis/sterile technique, hot and cold application, applying elastic hosiery, skin and wound care, interpersonal communication/interview process recording, care assessments, dysphagia, bowel and bladder training, catheter care, activity planning, dementia care, end-of-life care.
- 6 Perform client assessments: Home Environment Assessment, Braden Skin Assessment, Fall and Function Assessment, Spiritual Assessment, Pain Assessment and the Mini Mental State Examination.
- 7 Demonstrate advanced clinical skills in caring for older adults and their caregivers in the community-based long-term care setting.

Nursing

COMMUNICATION

- 1 Graduate: Establish effective patterns of communication.
- 2 Level I: Demonstrate foundational principles of therapeutic communication.
- 3 Level II: Apply principles of communication in the care of clients experiencing major disruptions in health.
- 4 Level III: Utilize principles of communication unique to the care of the childbearing family, children, families, and clients with disruptions in mental health.
- 5 Level IV: Establish effective patterns of communication.

NURSING GRADUATE & LEVEL OUTCOMES SKILLS/COMPETENCIES

- 1 Graduate: Implement and evaluate the delivery of nursing care according to the accepted standards of practice, licensure laws, and professional responsibilities.
- 2 Level I: Demonstrate knowledge and performance of designated nursing skills/competencies according to accepted standards of practice.
- 3 Level II: Implement nursing skills/competencies in accordance with established principles.
- 4 Level III: Perform nursing skills/competencies when providing nursing care to the childbearing family, children, families, and clients with disruptions in mental health according to specialty standards of practice and professional responsibilities.
- 5 Level IV: Implement and evaluate the delivery of nursing care according to the accepted standards of practice, licensure laws, and professional responsibilities.

NURSING PROCESS

- 1 Graduate: Formulate appropriate plans of care based on the nursing process.
- 2 Level I: Initiate the nursing process at a beginning level to assist client to function within their environment.
- 3 Level II: Implement the nursing process in the care of clients with major disruptions in health.
- 4 Level III: Adapt the nursing process to the care of the childbearing family, children, families, and clients with disruptions in mental health.
- 5 Level IV: Formulate appropriate plans of care based on the nursing process.

Patient Care Technician

- 1 Perform selected patient care services correctly and safely in a clinical setting, under the direction of a licensed nurse.
- 2 Practice appropriate verbal, non-verbal, and written communication with healthcare team members, patients, and families.
- 3 Demonstrate characteristics of flexibility, dependability, responsibility, and maturity in a work setting.
- 4 Demonstrate ability to follow proper legal requirements associated with role function.

PACE

Music

- 1 Transfer to a 4-year university and enroll in 3000 & 4000 level courses without remediation.
- 2 Progress at the appropriate level in the applied music lessons
- 3 Understand the history of music as it relates to theory and performance practice.
- 4 Participate in appropriate music ensembles.
- 5 Interpret and analyze the music student performs or hears, theoretically and historically.

Stage Production Technology

ASSOCIATE DEGREE

- 1 Employ knowledge acquired from the general education core to be a well-rounded employee.
- 2 Communicate visually through drafting, rendering, and model building skills.
- 3 Produce computer-aided drawings.
- 4 Relate the relevance of the theatre as a social force and a reflection of the human condition.
- 5 Construct, paint, and handle scenery.
- 6 Apply, as a technician, an understanding of design techniques in theatrical conditions.
- 7 Handle, manipulate lighting equipment.
- 8 Control and arrange intelligent lighting systems.
- 9 Use and maintain sound equipment.
- 10 Record and edit sound effects.
- 11 Wire a stage for sound.
- 12 Apply and understanding of costume techniques-proper measuring skills, various construction techniques, fabric savvy, costume cutting skills, and fabric manipulation.
- 13 Operate counter-weight fly systems, hemp fly systems, and simple rigging.
- 14 Exhibit on the job compliance to: OSHA, ESTA, IATSE, and USITT safety standards and regulations.
- 15 Manage people, exhibiting good interpersonal skills according to theatre decorum throughout the rehearsal and performance process.
- 16 Adapt to chosen occupational objectives the practical training and experience received through internship in a qualifying occupation setting.
- 17 Apply make-up with knowledge of its principles and techniques.

COSTUME CERTIFICATE

- 1 Perform the duties of a shop foreman in a costume department.
- 2 Cut and drape a variety of materials.
- 3 Draw and cut patterns of all styles and from all eras.

- 4 Manipulation of many different materials included but not limited to, leather, fabric, foam, felts, dyes, adhesives, etc.
- 5 Build a costume from scratch, from a designer's sketch.
- 6 Understand the environmental and safety impact of working costume shop.

ENTERTAINMENT CONSTRUCTION CERTIFICATE

- 1 Operate a variety of power tools.
- 2 Build any kind of scenery from drawings.
- 3 Utilize excellent drafting skills.
- 4 Work with a multitude of materials.
- 5 Work for a scenic shop.
- 6 Be Safe.
- 7 Effectively communicate.

LIGHTING CERTIFICATE

- 1 Hang, focus and maintain lighting instruments.
- 2 Read and understand a light plot.
- 3 Recognize circuitry load and electrical formulas.
- 4 Work as a master electrician for a lighting designer.
- 5 Do tie-ins to three (3) phase power.
- 6 Maintain electrical components, including but not limited to, cables, intelligent lighting fixtures, static fixtures, hazers, foggers, etc.

RIGGING CERTIFICATE

- 1 Hang theatrical scenery, lighting equipment, sound equipment, trusses, and soft goods.
- 2 Operate and maintain counterweight systems.
- 3 Operate and maintain hemp house systems.
- 4 Understand and manipulate chain motors.
- 5 Be able to be an up rigger. (If physically able)
- 6 Be able to be a down rigger.
- 7 Know and apply all applicable knots.
- 8 Understand the uses for all of the rigging hardware and how to check for safety.

SOUND CERTIFICATE

- 1 Set up a working sound system.
- 2 Run any brand of sound board for sound reinforcement at any type of venue.
- 3 Apply proper microphone techniques for different types of performances.

STAGE MANAGEMENT CERTIFICATE

- 1 Assist the director as requested.
- 2 Maintain rehearsal schedules, call times, and special events.
- 3 Contact and supervise crew.
- 4 Make sure that the crews are prepared and ready to go.
- 5 Make sure that the set and stage areas are clean, safe, and that props and furniture are set.
- 6 Read and tape out ground plans for rehearsal.

- 7 Communicate effectively with everyone working on the production.
- 8 Work effectively in any venue.
- 9 Understand and apply Actor's Equity, IATSE, SAG, USA, and AGMA Rules when necessary.
- 10 In touring situations, assess and determine the best way to deal with situations and peculiarities of different types and styles of performance venues.

Theatre

- 1 Understand theatre history, literature, and practice from early Greek period to the contemporary.
- 2 Demonstrate the fundamentals of acting, including terminology, movement, vocal control, and character analysis.
- 3 Apply the technical skills and practical application of techniques in constructing, painting, handling, and lighting scenery for the stage.

SCMA

Aviation Sciences Technology

AVIATION MAINTENANCE TECHNOLOGY OPTION

- 1 Understand the general theory and application of: general hangar and shop safety; mathematics; physics and basic aerodynamics; aircraft in flight and weight and balance; blueprints and drawings; structural materials and processes; aircraft cleaning and corrosion control; aircraft ground handling and servicing; hand and power tools and precision measuring instruments; aircraft hardware and fluid lines and fittings.
- 2 Interpret and apply Federal Aviation Regulations, maintenance publications and records.
- 3 Understand the theory and application of basic electricity, DC and AC electrical circuits, aircraft battery inspection and servicing, solid state circuits, aircraft motors and generators, and troubleshooting aircraft electrical systems and components.
- 4 Understand the general theory and application of fixed-wing and rotary-wing aircraft designs and basic configurations.
- 5 Understand the manufacture and repair of non-metallic and sheet metal structures, aircraft welding, aircraft finishes and fabric coverings.
- 6 Perform the servicing, inspecting, troubleshooting, and repairing of: hydraulic; pneumatic; landing gear; steering systems and components; aircraft cabin atmosphere and control systems; fuel quantity indicator; ice and rain control, fire detection and fire extinguishing systems and components; instruments; position and warning; pitot static; and communication and navigation systems.
- 7 Rig fixed-wing and rotary-wing aircraft and perform aircraft inspections.
- 8 Understand the fundamentals of reciprocating and turbine engine design and operation, the hands-on application of preventive maintenance, troubleshooting and repair of induction and exhaust systems, fuel and fuel metering, and ignition systems and components.
- 9 Understand the theory and practical application of preventive maintenance, troubleshooting and repair of propellers and propeller governing systems.
- 10 Service, inspect, troubleshoot, and repair turbine and reciprocating engine lubrication and cooling, and instrument and fire protection systems.
- 11 Perform turbine and reciprocating engine overhaul, including removal, installation, maintenance, repair, and troubleshooting.
- 12 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 13 Understand the basic principles, components, and operations of the three branches of the national government.
- 14 Demonstrate an understanding of the basic principles and problems of human experience and behavior.
- 15 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.

16 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.

17 Understand the principles and applications of the basic laws of physics.

AVIONICS OPTION

1 Understand the theory and application of aircraft familiarization, aircraft hardware, wiring and harness construction, installation practices, and Federal Aviation Regulations pertaining to instrument systems, and ramp test equipment.

2 Understand the design, operation, troubleshooting and maintenance of communication transceivers, navigation systems, distance measuring equipment, transponders, radar equipment, autopilots, radar altimeters and collision avoidance systems.

3 Understand the basic operation of computers.

4 Perform inspections and maintenance, and make repairs on AC and DC circuits, digital and pulse circuits, amplifiers, and microprocessors.

5 Demonstrate an ability to communicate effectively using written and verbal communication methods.

6 Understand the basic principles, components, and operations of the three branches of national government.

7 Demonstrate an understanding of the basic principles and problems of human experience and behavior.

8 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.

9 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.

10 Understand the principles and applications of the basic laws of physics.

MANAGEMENT OPTION

1 Perform basic functions of financial accounting, such as: measuring and recording financial data; journalizing transactions; adjusting entries for revenue and expense items; inventories; depreciation; internal control with an emphases of cash, current and long-term liabilities.

2 Understand theory of flight, power plant operation, service of aircraft, navigation principles and meteorology.

3 Understand the history and development of aviation from its beginning to the present. This includes a review of the social, economic, and political impact of aviation.

4 Understand the air traffic control and national airspace system. This includes history, development, organization, facilities, equipment, and communication networks.

5 Understand the basic operation of computers.

6 Understand the role of the manager in an organization and the various techniques of supervising employees including leadership, motivation, communication, attitudes, organization design and change.

7 Demonstrate an ability to communicate effectively using written and verbal communication methods.

8 Understand the basic principles, components, and operations of the three branches of national government.

9 Demonstrate an understanding of the basic principles and problems of human experience and behavior.

10 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.

11 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.

12 Understand the principles and applications of the basic laws of physics.

PROFESSIONAL PILOT OPTION

1 Perform all privileges allowed the holder of a Commercial Pilot Certification with an instrument rating, by the Federal Aviation Administration.

2 Understand the appropriate regulations, basic aerodynamics and the principles of flight, and airplane operations such as use of flaps, retractable landing gears, controllable propellers, weight and balance computations, and different performance speeds.

3 Be familiar with stall awareness, spin entry, spins, and spin recovery techniques for airplanes.

4 Understand the history and development of aviation from its beginning to the present. This includes a review of the social, economic, and political impact of aviation.

- 5 Understand the airtraffic control and national airspace system. This includes history, development, organization, facilities, equipment, and communication networks.
- 6 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 7 Understand the basic principles, components, and operations of the three branches of national governments.
- 8 Demonstrate an understanding of the basic principles and problems of human experience and behavior.
- 9 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 10 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 11 Understand the principles and applications of the basic laws of physics.

Biology

- 1 Students will demonstrate an understanding of the scientific process in the biological world as it is implemented by the Scientific Method. The student will further understand the need for continued biological research in a dynamic environment.
- 2 Students will demonstrate an understanding of the basic life processes, such as cell structure, obtaining and using of energy, and the processes of reproduction, heredity and evolution.
- 3 Students will demonstrate knowledge of the diversity, complexity and inter-relatedness of life.
- 4 Students in our laboratory classes will demonstrate proficiency in measurement and in using various techniques and equipment (including their strengths and weaknesses) as they apply to solving problems in the biological sciences.

Chemistry

- 1 Demonstrate mastery of the unique language of chemistry
- 2 Demonstrate ability to apply logical and mathematical strategies to solve chemical problems
- 3 Demonstrate understanding of the scientific method and its application in research and problem solving strategies
- 4 Demonstrate ability to use modern technological methods of data acquisition and analysis

Civil Engineering Technology

- 1 Exhibit a working knowledge of the basic principles of hydrology.
- 2 Demonstrate an understanding of soils testing and soils mechanics.
- 3 Apply civil drafting and surveying practices and procedures.
- 4 Effectively participate in a civil engineering project, both design and construction, from initial planning to project completion.
- 5 Take their place on the civil engineering team in industry, construction, government, consulting firms, or utilities.
- 6 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 7 Understand the basic principles, components, and operations of the three branches of the national government.
- 8 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 9 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 10 Understand the principles and applications of the basic laws of physics.

- 11 The program will help the graduate prepare to sit for the examination to become a Certified Engineering Technician given by the National Institute for the Certification of Engineering Technicians.
- 12 Prepare drawings using instruments of the profession, including computer-aided drafting.
- 13 Will have a working understanding of microcomputers.

Drafting and Design Engineering Technology

- 1 To prepare drawings using tools of the trade in a professional manner, while using knowledge of drafting room practices and techniques.
- 2 To solve drawing problems related to mechanical drafting standards frequently used by industrial manufactures.
- 3 To read, interpret, and prepare technical drawings at an entry level in the following specialty areas: a. Mechanical b. Structural c. Welding d. Civil
- 4 To identify production techniques as castings, forgings, die castings, metallurgical procedures, etc.
- 5 To make and interpret drawings using the American Society of Mechanical Engineers (ASME) standards applying to decimal inch, metric, ASME Y14.5 Geometric Dimensioning and Tolerancing.
- 6 To solve basic loading of structural members, make decisions regarding proper size, shape, and each member function.
- 7 To secure needed data from reference materials such as Machinery's Handbook, American Institute for Steel Construction (AISC) manual, ASAWS, etc.
- 8 To operate/generate drawings in AutoCad and it's operating system (Windows or DOS) and demonstrate computer literacy.
- 9 To draw and make a decision as to the proper type drill jig or fixture for a given part or assembly.
- 10 Produce engineering drawings from prints, sketches and verbal instructions with proper lettering, notes and dimensions.
- 11 Design simple structures of wood, steel and concrete and calculate loads, forces, and sizes of members required for a structure.
- 12 Describe basic manufacturing processes and advantages as related to a given design or product.
- 13 Make freehand technical sketches from field notes for design use.
- 14 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 15 Understand basic principles, components, and operations of the three branches of the national government.
- 16 Exhibit proficiency in basic mathematics, algebra, and trigonometry.
- 17 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 18 Understand the principles and applications of the basic laws of physics.

Electronics Technology

ASSOCIATE DEGREE

- 1 Support engineering in designing and troubleshooting manufactured equipment.
- 2 Use data books and design specifications to check functional electronic components in a circuit, such as diodes, resistors, capacitors, integrated circuit transistors, SCR's, triacs, etc.
- 3 Use measuring equipment and instrumentation equipment which includes ammeter, voltmeter, ohmmeter, multimeter, wattmeter, bridges, oscilloscope, potentiometer, function generator, and frequency counter.
- 4 Develop and carry ideas to completion by applying theories and hands on experience learned in the classroom.
- 5 Assist in installation, and perform acceptance test on new equipment.

Division Dsc/Pgm Option # Competencies

- 6 Aid in production operation, such as working out specifications for materials and method of manufacturing and devising tests to insure quality control of products.
- 7 Will have knowledge about software and firmware as well as data entry skills.
- 8 Assist in the review of drawings and be able to analyze specifications.
- 9 Will have a good understanding of microprocessors and memory chip principles.
- 10 Demonstrate an ability to communicate effectively using written and verbal communication skills.
- 11 Understand basic principles, components, and operations of the three branches of the national government.
- 12 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 13 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 14 Understand the principles and applications of the basic laws of physics.
- 15 Understand, read, and draw schematic diagrams.

AUTOMATED TECHNOLOGY OPTION

- 1 Understand the concept of a total computer integrated manufacturing plant.
- 2 Understand the application of the hardware and software for Plant Operation Networking.
- 3 Have a good working knowledge of Microcomputers, Programmable Logic Controllers, and Disk Operating Systems.
- 4 Have a good working knowledge of solid state electronics.
- 5 Understand concepts involved in hydraulics, pneumatics, mechanisms, and integration of data acquisition.
- 6 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 7 Understand basic principles, components, and operations of the three branches of the national government.
- 8 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 9 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 10 Understand the principles and application of the basic laws of physics.

BIOMEDICAL EQUIPMENT TECHNOLOGY OPTION

- 1 Apply knowledge about the theory of operation, the underlying physiologic principles and practices, and the safe clinical application of biomedical equipment.
- 2 Obtain performance data and design information on electronic components, (diodes, resistors, capacitors, integrated circuits, transistors, etc.) from technical literature and other sources.
- 3 Use and understand a wide range of measuring and testing instrumentation equipment including ammeter, voltmeter, wattmeter, multimeter, strip-chart recorders, x-y plotter, ohmmeter, bridges, oscilloscope, receptacle analyzer, receptacle tension tester, circuit safety analyzer, ground fault tester, humidity tester, defibrillator tester, electrosurgical analyzer, and tachometers.
- 4 To test, troubleshoot, analyze, diagnose, calibrate, and adjust biomedical equipment, devices, systems, and instruments. Demonstrate an ability to communicate effectively using written and verbal communications methods.
- 5 Understand the basic principles, components, and operations of the three branches of the national government.
- 6 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 7 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 8 Understand principles of applications of basic physics laws.

ELECTRONICS TECHNOLOGY GENERAL OPTION

- 1 Work from well documented procedures to diagnose malfunctions in components, instruments, or complex systems.
- 2 Assist with installation and acceptance tests on new equipment.

Division Dsc/Pgm Option # Competencies

- 3 Align, calibrate, maintain, and repair complex specialized electronic related equipment and a wide range of test, control, and instrumentation equipment.
- 4 Keep records of equipment performance/maintenance schedules.
- 5 Assist engineers in developing experimental equipment and models by making drawings and sketches.
- 6 Aid in production operation, such as working out specification for materials and methods of manufacturing and devising tests to insure quality control of products.
- 7 Perform liaison work between engineering and production and other departments.
- 8 Obtain performance data/design information on electronic components, resistors, capacitors, integrated circuits, diodes and transistors from technical literature and sources.
- 9 Use and understand wide range of measuring/testing instrumentation equipment such as: ammeter, voltmeter, multimeter, wattmeter, strip chart recorder, x-y plotter, ohmeter, bridges, oscilloscope, potentiometer, and frequency counter.
- 10 Do a basic amount of design work.
- 11 Apply knowledge of software/firmware and data entry skills.
- 12 Identify electrical electronic components, devices or systems in accordance with predetermined specifications.
- 13 Operate and calibrate electronic test instruments.
- 14 Identify malfunctions in electronic equipment.
- 15 Repair defective electronic equipment.
- 16 Describe the operating characteristics of various electronics, components, and equipment.
- 17 Assist in the review of shop drawings and specifications.
- 18 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 19 Understand basic principles, components, and operations of the three branches of the national government.
- 20 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 21 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 22 Understand the principles and applications of the basic laws of physics.

Engineering

- 1 Think critically within the engineering discipline
- 2 Communicate Engineering Concepts Effectively

Geography

- 1 Students will display a capability to define patterns and processes ("what") of various geographic phenomena.
- 2 Students through use of mapping techniques will apply geographic insight to show location and distribution ("where") of geographic phenomena
- 3 Students by application of gained knowledge from text, lecture, and other technologies will explain phenomena location ("why") in a manner that displays knowledge of cultural and natural factors and processes responsible.
- 4 Students by answering well framed test questions, given as objective or essays, will manifest a clear ability to critical think.

Geology

- 1 Be able to identify and explain geologic phenomena.
- 2 Be able to locate the phenomena relative to the process of cause.
- 3 Be able to explain geologic phenomena in terms of the natural forces or process responsible for existence.
- 4 Be able to place geologic phenomena into the chronology of Earth's geological history.

Horticulture Technology

APPLIED HORTICULTURE OPTION

- 1 Propagate, transplant, prune, and maintain ornamental roses, succulents, cacti, orchids, bromeliads, bulb, corn and tuber-plants.
- 2 Evaluate and implement removal of excessive soil water which could interfere with maintenance of high quality turf and other landscape plants.
- 3 Culture and maintain plants for use in medical rehabilitation and community gardening programs.
- 4 Culture and maintain bonsai plants.
- 5 Design, construct, and maintain green houses, fountains, garden pools, and outdoor lighting in home gardens.
- 6 Design floral arrangements using orchids and bromeliads.

GENERAL OPTION

- 1 Read at a college level and write clear/simple instructions, proposals, letters, and reports.
- 2 Understand basic biological principles involving plant growth and development, as it relates to commercial horticultural activities.
- 3 Understand elementary ecological principles especially as they pertain to site selection, species and variety performance, and outcomes of management activities.
- 4 Be familiar with the variety and extent of the horticultural industry of Oklahoma, especially the Tulsa area.
- 5 Plant, transplant, prune, brace ornamental plant materials, and be familiar with common equipment used in these operations.
- 6 Identify by sight, commonly used native/exotic, indoor and outdoor, ornamental and weed plants, properly using both scientific/common names. Be familiar with practical applications, uses and pest control measures for these plants.
- 7 Be familiar with typical conditions, and practical and scientifically accepted management practices of soils in the Tulsa area. Be familiar with various soil amendments commonly used. Conduct field soil tests.
- 8 Identify the most common horticultural insect, disease, and weed pests in the Tulsa area. Be familiar with recommended pest control measures, including the safe use of pesticides and governmental regulation. Be able to pass the Ornamental and Turf examination for commercial pesticide applicators in Oklahoma.
- 9 Sow seeds, transplant, prune, train, and brace ornamental plants. Be familiar with techniques and equipment involved in cuttings, grafting, and mist propagation.
- 10 Understand basic landscaping design principles; perform basic drafting skills and understand the principles of interpreting and writing landscape specifications/contracts.
- 11 Be familiar with identification features and commercial applications of turfgrasses usable in the Tulsa area. Also, become familiar with equipment and basic management practices used in the turf industry.
- 12 Be familiar with construction, maintenance, and uses of customary structures and specialized equipment used to grow horticultural plants. Also, be able to plan the production of nursery and greenhouse crops.
- 13 Correctly operate and perform preventative maintenance on small engines and related components. Be knowledgeable of accepted safety practices for horticultural machinery.
- 14 Design residential and small commercial irrigation systems. Assemble and install lawn sprinklers and other types of irrigation systems.
- 15 Design basic floral arrangements and apply these to various interior settings. Be familiar with the operations of wholesale and retail floral businesses in the Tulsa area.

Division Dsc/Pgm Option # Competencies

- 16 Be basically familiar with unique management practices of horticultural industries in the Tulsa area.
- 17 Be familiar with plant materials, equipment, and practices involved with the production of vegetables, fruit, and nut crops in northeast Oklahoma.
- 18 Be familiar with human relations and business practices related to the horticulture profession.
- 19 Be familiar with government processes of the United States.
- 20 Have an overview of the history of the United States.
- 21 Be able to operate a desk-top computer, using a word processor/spreadsheet/database and current horticulture software.
- 22 Have an overview of Technical Mathematics or College Algebra.

Manufacturing Engineering Technology

- 1 Assist manufacturing engineers in problem solving/planning efforts in a manufacturing environment.
- 2 Apply knowledge in the operation of a variety of equipment utilized in the Manufacturing Industry (mills/lathes, conventional/CNC), operation and programming, and inspection equipment.
- 3 Apply technical knowledge in metallurgy robotics, manufacturing processes, quality control and engineering economics.
- 4 Be familiar with CAD operation and will have the ability to develop drawings on a CAD system.
- 5 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 6 Understand basic principles, components, and operations of three branches of national government.
- 7 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 8 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 9 Understand the principles and applications of the basic laws of physics.
- 10 The graduate will be familiar with the use of computers and computer control systems.

Mathematics

- 1 Demonstrate knowledge of the interrelationship between college algebra mathematics and other subject areas.
- 2 Analyze a problem, formulate a plan/process, and then implement it to solve the problem drawing from a wide knowledge base of numerical, symbolic, graphical and logical techniques.
- 3 Recognize, define, and then communicate in algebraic and/or graphical forms the characteristics and properties of different types of functions and systems studied in College Algebra.
- 4 Model real world information using different strategies for analyzing data.

Numerical Control/Machinist Technology

CRAFTSMANSHIP 2000 METALWORKING OPTION

- 1 Demonstrate a solid foundation of knowledge in the basic skills necessary to be successful as a journeyman in the metal working trade.
- 2 Manifest an ability to communicate effectively using written and verbal communication methods.
- 3 Understand basic principles, components and operations of the three branches of the federal government.
- 4 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 5 Possess a basic knowledge of quality control procedures.
- 6 Demonstrate good management practices.

Division Dsc/Pgm Option # Competencies

- 7 Exhibit knowledge of basic metallurgy.
- 8 Utilize basic skills in the operation of microcomputers.
- 9 Have a good understanding of statistical quality control.

GENERAL OPTION

- 1 Qualify for employment and advance in the field of Numerical control and Machinist Technology.
- 2 Use power machines normally associated with machine shops and will have a sound background in technical theory, bench work, floor work, assembly, layout, inspection, and metallurgy.
- 3 Program and operate NC and CNC equipment.
- 4 Offer marketable skills to the manufacturing sector.
- 5 Set up and operate standard machine tools.
- 6 Set up and operate Numerical Control machine tools.
- 7 Set up and operate Computer Numerical Controlled machine tools.
- 8 Choose from a variety of industrial processes in order to produce saleable goods in the manufacturing sector.
- 9 Coordinate with and make use of computer resources to produce saleable goods.
- 10 Program using APT.
- 11 Have a working knowledge of Smart CAM software.
- 12 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 13 Understand basic principles, components and operations of the three branches of the national government.
- 14 Demonstrate an understanding of the basic principles and problems of human experience and behavior as applied to employee/employer relations.
- 15 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 16 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 17 Understand the principles and applications of the basic laws of physics.

TOOL & DIE SUPPORT TECHNICIAN (WHIRLPOOL OPTION)

- 1 Use power machines normally associated with machine shops and will have a sound background in technical theory, bench work, floor work, assembly, layout, inspections, and metallurgy.
- 2 Offer marketable skills to the manufacturing sector.
- 3 Set up and operate standard machine tools.
- 4 Choose from a variety of industrial processes in order to produce saleable goods in the manufacturing sector.
- 5 Coordinate with and make use of computer resources to produce saleable goods.
- 6 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 7 Understand basic principles, components and operations of the three branches of the federal government.
- 8 Demonstrate an understanding of the basic principles and problems of human experience and behavior as applied to employee/employer relations.
- 9 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 10 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 11 Understand the principles and applications of the basic laws of physics.

Physical Education

- 1 Physical Fitness Development: Demonstrate an improvement of the cardiovascular and muscular system

- 2 Motor Skills Development: Demonstrate proper technique and training within a discipline
- 3 Cognitive Development: Demonstrate the ability to explain the importance of a Physical Fitness Program
- 4 Affective Development: The participant will demonstrate an appreciation for the contribution of exercise to his or her lifestyle

Physics / Physical Science

- 1 Think critically within the Physics discipline
- 2 Communicate physics/physical science concepts effectively.
- 3 Demonstrate proficiency in a physics laboratory

Quality Control Technology

- 1 Understand the definitions, principles, and objectives of the Quality Control field.
- 2 Interpret the standard methods of dimensioning and the application of notes and symbols on blueprints.
- 3 Perform linear and angular measurements and calibrations. Demonstrate a knowledge of inspection techniques and requirements for receiving, in-process, and final inspection for both job-shop and mass production environments.
- 4 Understand use of statistical methods used in quality control, application of nondestructive testing, various codes and standards that need to be interpreted, and surveying and auditing of quality procedures and systems.
- 5 Apply established procedures and standards for controlling quality, using prescribed methods.
- 6 Understand the basic concepts, needs, and purposes of controlling quality.
- 7 Be informed of current developments and ideas being applied for controlling quality.
- 8 Combine quality principles with basics of other disciplines to enable an enterprise to meet the quality requirements.
- 9 Prepare for various Quality Control Technician certification examinations given by American Society for Quality.
- 10 Have a good understanding of computer concepts.
- 11 Demonstrate an ability to communicate effectively using written and verbal communication methods.
- 12 Understand basic principles, components, and operations of three branches of national government.
- 13 Exhibit proficiency in basic mathematics and algebraic concepts and techniques.
- 14 Exhibit knowledge of a period of American history, i.e., 1492 to 1865 or 1865 to present.
- 15 Understand principles/applications of basic laws of physics.

Surveying Technology

- 1 Read at a college level; write clear and simple instructions, proposals, letters, and reports.
- 2 Have a working knowledge of mathematics, including trigonometry and geometry.
- 3 Use hand-held calculators and personal computers in making surveying computations and keeping records.
- 4 Have an elementary knowledge of statistical principles, including a variety of measurement errors, encountered in surveying work.
- 5 Be able to use steel tapes, electronic distance measurement instruments, levels, theodolites, transits, total stations, and GPS instruments in making surveying measurements.

Division Dsc/Pgm Option # Competencies

- 6 Have the ability to keep legal records of simple surveying measurements.
- 7 Be familiar with the variety and extent of the surveying industry in Oklahoma.
- 8 Be familiar with various types of legal land descriptions, on both small and large scale.
- 9 Be able to evaluate and interpret MAPS.
- 10 Have an elementary, working knowledge of astronomical observations for surveying purposes.
- 11 Be familiar with the Public Land Survey System and other boundary systems.
- 12 Be familiar with the Global Positioning System (GPS) and its application in surveying.
- 13 Be familiar with Geographic Information Systems (GIS) and its applications in land management.
- 14 Be familiar with the history of surveying, including archaic equipment and methods.
- 15 Be familiar with United States history and government.

Veterinary Technology

GENERAL HOSPITAL DUTIES

- 1 Overall supervision of office procedures
- 2 Pharmacy inventory management
- 3 Supervise ward and general care of hospitalized patients
- 4 Maintain complete record system
- 5 Client education
- 6 Quality control of laboratory equipment
- 7 Maintenance of hospital diagnostic equipment (laboratory, x-ray, anesthesia machines, etc.)

GENERAL NURSING

- 1 Animal restraint procedures
- 2 Taking patient vital signs
- 3 Administration of medication (including injections)
- 4 Grooming
- 5 Express anal sacs
- 6 Administer enemas
- 7 Suture removal
- 8 Collect fecal, urine, and blood samples
- 9 Skin scrapings
- 10 Recognize deviations from normal signs
- 11 Emergency first aid treatment (under supervision of veterinarian)
- 12 Perform prescribed treatments
- 13 Perform ECG's
- 14 Blood transfusions
- 15 Apply bandages and splints
- 16 Urinary catheterization (including jugular indwelling catheters)
- 17 Fluid therapy
- 18 Euthanasia and necropsy procedures

LARGE ANIMAL PROCEDURES - BOVINE (CATTLE)

1 Restraint (chutes, head gates)

2 Injections

3 Vital signs

4 Blood collection

5 Passage of stomach tube

6 Bandaging techniques

7 Dipping procedures

8 Hoof care

9 IV fluid administration

10 Semen collection and evaluation

11 Familiarization with bovine equipment

12 Surgical site preparation

13 Brucellosis and TB testing

LARGE ANIMAL PROCEDURES - EQUINE (HORSES)

1 Restraint Leg and tail wraps

2 Floating teeth

3 Injections at various locations

4 IV catheterization

5 IV fluid administration

6 Hoof care

7 General anesthesia

8 Effects of tranquilizers

9 Passage of stomach tube

10 Vital signs (temp, pulse, respiration)

11 Blood collection

12 Familiarization with equine equipment

13 Surgical site preparations

14 Artificial insemination techniques

LARGE ANIMAL PROCEDURES - OVINE/CAPRINE (SHEEP/GOATS)

1 Restraint

2 Disbudding

3 Injection Hoof care

4 Vital signs

5 Blood collection

6 Bandaging procedures

LARGE ANIMAL PROCEDURES - PORCINE (SWINE)

1 Restraint

2 Injections in various locations

3 Vital signs

Division Dsc/Pgm Option # Competencies

- 4 Blood collection
- 5 Clipping needle teeth
- 6 Familiarization with swine operations
- 7 Equipment familiarity

RADIOLOGY

- 1 Film developing techniques
- 2 Follow safety procedures
- 3 Maintain filing system
- 4 Maintain radiography log book
- 5 Film storage and solution care
- 6 Positioning for routine x-rays
- 7 Taking of a variety of x-ray studies
- 8 Contrast media radiography: barium studies, IVP, pneumocystograms, etc.

SURGERY

- 1 General operating room sanitation and care
- 2 Instrument preparation and care
- 3 Sterilization techniques of surgical instruments
- 4 Administer pre-op medications
- 5 Surgical preparation
- 6 Artificial respiration
- 7 C. P. R.
- 8 Preparing of surgery packs, drapes, and gowns
- 9 Administer and monitor anesthesia (including gas anesthesia)
- 10 Endotracheal intubation
- 11 Gowning and gloving procedures
- 12 Surgical assisting
- 13 Intensive and critical care nursing
- 14 Controlled ventilation
- 15 Monitor venous and arterial pressures

VETERINARY LABORATORY PROCEDURES - BLOOD CHEMISTRIES

- 1 Sample preparation (serum vs plasma)
- 2 Analyzer equipment use
- 3 Elisa test kits
- 4 Specialized testing & shipping procedures

VETERINARY LABORATORY PROCEDURES - CYTOLOGY

- 1 Sample collection
- 2 Staining techniques
- 3 Cellular identification
- 4 Vaginal cytology (cycle status)

VETERINARY LABORATORY PROCEDURES - HEARTWORM TESTS

1 Difil (modified Knott's) test

2 Occult assay

VETERINARY LABORATORY PROCEDURES - HEMATOLOGY (BLOOD EV

1 Collection

2 Packed cell volume

3 Unopette WBC and RBC

4 Differentials (normal & abnormal)

5 Platelet counts

6 Reticulocyte counts

7 Eosinophil counts

8 Cross-matching

9 Total proteins

10 Prothrombin times

11 Clotting times

12 Electronic cell counting

VETERINARY LABORATORY PROCEDURES - LABORATORY ANIMAL NUR

1 Instruction is provided for technical skills for the mouse, rat, guinea pig, birds, and rabbits.

2 Identification - ear punch, ear tags, tattooing, wing and bands

3 Sexing of various species

4 Blood collection

5 Oral dosing

6 Restraint and handling

7 Injections

8 Anesthesia

9 Euthansia

10 Necropsy

VETERINARY LABORATORY PROCEDURES - MICROBIOLOGY

1 Sample preparation

2 Media inoculation

3 Identification

VETERINARY LABORATORY PROCEDURES - PARASITOLOGY (ALL SPECIE

1 Fecal flotation set up and reading

2 Direct smears

3 Skin scraping and identification of mites

4 Identification of common ecto-parasites

5 Fecal trypsin enzyme test

VETERINARY LABORATORY PROCEDURES - URINALYSIS

1 Collection procedures

2 Refractometer use for determining specific gravity

3 Urine dipstick reading methods

Division	Dsc/Pgm	Option	#	Competencies
----------	---------	--------	---	--------------

			4	Sediment evaluation
--	--	--	---	---------------------

			5	Suture and sensitivity
--	--	--	---	------------------------

			6	Identification of parasites
--	--	--	---	-----------------------------
