Minor in Anthropology

The minor of 18 hours requires one course from any of the three following four sets: ANT 222 or ANT 221; ANT 250 or 351; ANT 260 or ANT 361, ANT 270 or ANT 223. The remaining hours are to be selected within the Department of Anthropology with the approval of the minor advisor.

Minor in Futures Studies

The minor program in Futures Studies is an interdisciplinary social science program offered by the Center of Behavioral Sciences and administered by the Department of Anthropology. The minor is supplementary to major programs of anthropology, geography, planning and sociology and to other degree programs of the university. The minor of 18 hours requires ANT 385 and fifteen additional hours including at least three courses from the following: ENV 101; PBS 201; ECO 346; SOC 447 and ANT 583.

DENTAL HYGIENE

Faculty: C. Ririe, Acting Chairperson, J. McClure, T. Moore, S. Peterson, S. Tyrrell.

Objectives

It is the objective of the Dental Hygiene Department to educate graduates who possess the high levels of professional skill and knowledge necessary for the performance of minimal periodontal therapy and maintenance together with disease control motivation in a preventive-oriented dental office. The curriculum is designed to prepare graduates to pursue additional career opportunities as well.

Bachelor of Science in Dental Hygiene

Prerequisites for admission to the four-year program which lead to the baccalaureate degree are outlined in the admissions section.

To qualify for graduation, the student must complete 75 hours of combined liberal studies and specifically required cognate courses, 56 hours of dental hygiene courses and 12 hours in an approved emphasis area.

Seventy-five hours of combined liberal studies (minimum 45 hours) and cognate courses must be completed to be considered for acceptance in the Dental Hygiene program and must include: ENG 102, 103; MAT 110, (or MAT 112, highly recommended), CHM 101:102,151, 250, 304, and 251; DH 100; BIO 135, 136, 332; PS 150; SOC 300; HE 156; MBI 205, 320; SC 161; PHY 141; HPR 229, nine hours of lower division liberal studies chosen from the social and behavioral science or humanities blocks, and 3 hours from the chosen area of emphasis. No more than 18 hours of the above may be in progress at the time of application.

After acceptance to the dental hygiene program, the student must complete the following: DH 300, 301, 306, 307, 319:320, 326, 335, 338 (4 credit hrs.), 340, 354, 369, 393, 400, 408 (2 credit hrs.), 416, 418 (4 credit hrs.), 421:422, 473, and nine hours from the chosen area of emphasis. DH 408 will require the student to spend two weeks at a USPHS clinic during the summer term between his or her junior and senior years.

For detailed listing of entrance and course requirements, fees, and deadlines, the candidate should write to the Chairperson, Department of Dental Hygiene, Box 15065, Northern Arizona University. The deadline for submission of all required application materials is March 1st preceding the academic year of actual admittance.

TRANSFER PROGRAM: Individualized study programs for dental hygienists who desire to earn a Bachelor of Science degree are available. Those students having been out of school or in private practice for a considerable length of time may be expected to take one semester of clinical dental hygiene. Electives may be taken in most academic areas offered by the university.
CSC 486 Hybrid Computers (3). Basic principles of operation, use and applications of hybrid computers; emphasis on the understanding of the different parts of the hybrid computer; the parallel logic section, analog section, and the digital computer section. 2 hrs. lecture, 3 hrs. lab. *Prerequisites:* CSC 247, 375.

CSC 495 Real Time Systems Analysis (3). An introduction to RBM, JCL, and real time programming; a discussion of interrupt handling procedures with application to real time control; and overview of real time and time sharing systems. *Prerequisite:* CSC 284.

CSC 496 Design of Problem-Oriented Language (3). A survey of Problem Oriented Languages available to scientific computer users (APL, SLI, GPSS, and others). *Prerequisite:* CSC 372.

**DH: DENTAL HYGIENE**

**NOTE:** Students must be accepted to the Dental Hygiene Program before taking the courses listed below. The only exceptions are for enrollment in DH 100, DH 121, DH 131 and DH 132, when offered.

DH 100 Orientation (1). Survey of dental hygiene, dentistry and related professions; personal and oral health; introduction to patient education.

DH 121 Introduction to Dental Assisting (3). Detailed study of art of dental assisting. 2 hrs. lecture, 3 hrs. lab.

DH 131 Clinical Dental Assisting I (3). Supervised clinical practice of dental assisting in selected facilities. 2 hrs. lecture, 3 hrs. lab.

DH 132 Clinical Dental Assisting II (3). Supervised clinical practice of dental assisting in selected facilities. *Prerequisite:* DH 131.

DH 300 Pharmacology (2-3). An introduction to the theory of operation and practice in pharmacology as it relates to the medical-dental sciences. *Cross listing:* NUR 300.

DH 301 Preventive Dentistry (2). The concepts of preventive dentistry procedures utilized with the individual patient as applied to clinical situations.

DH 306 Histology (2). Introductory study of cells, tissues, and organ systems of the human body, with emphasis on oral structures. 2 hrs. lecture, 3 hrs. lab.

DH 307 Dental Anatomy (2). Anatomy of structures of the oral cavity with an emphasis on function. 1 hr. lecture, 3 hrs. lab.

DH 319 Pre-Clinical Dental Hygiene (4). Introduction to the clinical skills of dental hygiene. 2 hrs. lecture, 6 hrs. lab. *Prerequisite:* DH 100.


DH 326 Oral Medicine (2). Diagnosis and recognition of the nature and cause of the disease process; principles of treatment; diagnosis, etiology, prevention and control of diseases of teeth, their surrounding and supporting structures; relation of dental to total health. 2 hrs. lecture.

DH 335 Head and Neck Anatomy (2-3). An intensified lecture and laboratory study of gross structures and tissues of the human head and neck including functional anatomy. 1 hour lecture and 3-4 hours laboratory per week.

DH 338 Oral Radiography (3). The physics of radiography, the operation of the X-ray machine, the practice of taking and developing dental X-rays, and oral radiographic interpretation. Two of these topics may be covered in any given semester. May be repeated once for a maximum of 4 credits. 2 hrs. lecture, 3 hrs. lab.

DH 340 Oral Pathology (2). Introduction to general pathology: pathology of diseases affecting the teeth and their supporting structures; oral manifestations of systemic disturbances. 2 hrs. lecture.

DH 354 Dental Materials (2). A survey of materials used in dentistry. 1 hr. lecture, 3 hrs. lab.

DH 369 Introduction to Expanded Functions (2). The first of three courses dealing with the duties the hygienist is now allowed to perform according to state law. 1 hr. lecture, 3 hrs. lab. *Prerequisite:* DH 335 with grade of C or better.

DH 393 Dental Specialties (1). A survey of the specializations in the field of dentistry encountered by the dental hygienist. 1 hr. lecture.

DH 400 Seminar (2). Analysis of scientific resource literature.
DH 403 Intermediate Expanded Functions (2). Second of the series of courses in expanded functions as allowed by state law: work in the clinical setting with the dentist and his patient. 1 hr. lecture, 3 hrs. clinic. **Prerequisite:** DH 369.

DH 404 Advanced Expanded Functions (3). Advanced course in series: work in the clinical setting with the dentist and patient in advance procedures as allowed by Arizona state law. 2 hrs. lecture, 3 hrs. clinic. **Prerequisite:** DH 403.

DH 416 Practice Management and Ethics (2). The principles of professional ethics; the laws and regulations related to dentistry; essentials of office management, record keeping, and practice building. 2 hrs. lecture.

DH 418 Periodontics (2). A survey of the causes, prevention, and treatment of diseases affecting the periodontal tissue. One of these three topics will be covered in any given section. The course may be repeated for a maximum of 6 hrs. credit. 2 hrs. lecture.

DH 421 Clinical Dental Hygiene (6). Integration of dental hygiene sciences with experiences in clinical procedure. 2 hrs. lecture, 12 hrs. clinic. **Prerequisite:** DH 320.

DH 422 Clinical Dental Hygiene (6). Continuation of DH 421. 2 hrs. lecture, 12 hrs. clinic. **Prerequisite:** DH 421.

DH 430 Introductory Dental Hygiene Teaching Internship (3). Techniques of preclinical instruction of dental hygiene with practice in teaching and evaluating laboratory performances of students. Approximately 6 hrs. lab.

DH 473 Dental Public Health (3). Teaching of dental health; methods and materials; theory and practice of preventive dentistry and public health. Open to dental hygiene students with 30 hours in the dental hygiene curriculum. 2 hrs. lecture, 3 hrs. field experience.

### DP: DATA PROCESSING/INFORMATION SYSTEMS

**DP 120 Introduction to Data Processing** (3). Basic concepts of information system development using a computer including: data input systems, hardware components, timeshare and batch terminals, flowcharting, and an introduction to programming. **Prerequisite:** High school algebra.

**DP 251 Fortran Programming for Informations Systems** (3). Using the FORTRAN language for nonscientific applications such as business, statistics, sample survey analysis, and simple report generation.

**DP 261 COBOL Programming** (3). A study of the Common Business Oriented Language; skills in problem formulation, coding, testing, and documentation developed through required computer programs. **Prerequisite:** DP 120 or equivalent.

**DP 284 Assembler Languages** (3). See CSC 284.

**DP 351 Advanced Applications Using COBOL** (3). Applying the COBOL Language to advanced problems using case studies from industry; other related software will be included as necessary. **Prerequisite:** DP 261 or equivalent.

**DP 360 Information Systems Analysis and Design I** (3). Application of systems concepts to the analysis and design of computer based information systems; cases and projects incorporating current small business computer hardware and software.

**DP 361 Information Systems Analysis and Design II** (3). Advanced concepts in the analysis, design and implementation of computer based information systems; projects and cases oriented toward large on-line systems using tape and disk with multiple file structures.

**DP 435 Advanced Programming Systems Seminar** (3). Special purpose languages such as assembler, simulation languages, report program generators, and other languages and projects depending on the individual requirements and desires of the students.

**DP 445 Data Base Management Systems** (3). Emphasis on the design of a CODASYL-type data base; loading, updating, and retrieving data for a small data base will be required using COBOL as the host language. **Prerequisite:** DP 251 or 261.

### Graduate Courses

**DP 550 Data Processing for Teachers** (3). Basic concepts in data processing with special emphasis upon their application to subjects taught at the secondary and community college levels; manual, mechanical, and electronic data processing systems; an introduction to computer programming. No previous background in data processing is required.