

University of Alaska Fairbanks

New Degree Program Request Format 3

Dental Hygiene Associate of Applied Science 69 credits

Submitted by
Allied Health Division
Tanana Valley Campus
College of Rural and Community Development
October, 2007

I. Cover Memorandum

A. Request prepared by

Rena L. Bower, CDA, RDH, Assistant Professor, Dental Hygiene Director
Richard Caulfield, PhD, Director Tanana Valley Campus
Marsha Sousa, PhD, Allied Health Coordinator

B. Dental Hygiene Program , Objectives, and Career Opportunities

The primary goal of the Dental Hygiene program is provide students with the knowledge and clinical skills required for entry-level positions as dental hygienists. The program goals are achieved by meeting or exceeding the requirements established by the Commission of Dental Accreditation. A successful graduate of the University of Alaska Fairbanks/ Tanana Valley Campus dental hygiene program will take and pass the required exams for licensure in the State of Alaska as established by the State of Alaska Board Dental Examiners. Those exams consist of the Dental Hygiene National Written Board, and the clinical and local anesthetic boards administered by the Western Regional Examining Board (WREB).

Career opportunities are strong as cited by the State of Alaska Department of Labor and Workforce Development (DOLWD) 2002-2012 study. An article based on this study in the October, 2004 *Alaska Economic Trends* predicts an increase of over 40% in the need for dental hygienists, one of the highest rates of anticipated need among the occupations tracked by the state. A related DOLWD report projects 22 annual openings for dental hygienists statewide. The site specifies an average entry-level wage of \$38,960 and a mean salary of \$63, 810.

The UAF/TVC dental hygiene program will consist of a two-year academic schedule. Students will be selected for admission to the AAS in Dental Hygiene following successful completion of the prerequisite course work and other qualifications outlined in the application packet. The UAF/TVC dental hygiene program was directly modeled after the successful dental hygiene program at the University of Alaska Anchorage (UAA). The UAA dental hygiene program has been established for over 20 years and is accredited by CODA. UAF/TVC has the full support and cooperation of UAA in this endeavor. Further, the Allied Health Alliance and Karen Purdue, Vice President for Health Programs, are in agreement that it is in the best interest of the University and the State that UAF align its program with UAA.

The proposed dental hygiene program at the University of Alaska Fairbanks/ Tanana Valley Campus received initial accreditation from the Commission on Dental Accreditation (CODA) in August of 2007, following the site visit on May 3-4 of 2007. CODA is the governing division of the American Dental Association that sets the standards and requirements for curriculum and facilities, conducts site visits which review curriculum (existing and proposed) and school facilities, and grants accreditation for dental and dental hygiene programs and schools. CODA will conduct another site visit prior to the graduation of the first cohort of six students to review standards and compliance to curriculum and goals of the school.

C. Signature Approvals:

Marsha Sousa
Allied Health Program Coordinator

Date

Ed Husted, TVC Academic Council Chair

Date

Richard A. Caulfield
Director, Tanana Valley Campus

Date

Bernice Joseph
Vice Chancellor for Native, Community and Rural Education

Date

Jon Genetti
President, UAF Senate Faculty

Date

Stephen B. Jones
Chancellor

Date

Mark Hamilton
President

Date

Board of Regents

Date

II. Identification of the Program

A. Description of Program

1. Title of Program

Dental Hygiene

2. Credential Level of the Program

Associate of Applied Science

3. Admissions requirements and prerequisites

Admission to the dental hygiene program is competitive. Only 6 students per year are accepted. Acceptance is based on the following criteria:

- a. Completion of a UAF application
- b. Completion of a Dental Hygiene Program application
- c. Proof of immunity to rubella, rubeola, varicella, hepatitis A, hepatitis B, tetanus, diphtheria, and pertussis
- d. Evidence of freedom from tuberculosis by PPD or chest x-ray within the previous 6 months
- e. Current CPR certification for health care providers
- f. Completion of the required prerequisite and AAS requirement courses with a C (2.0) or better in each course, and an overall GPA of at least 2.5. GPA is considered in the admission criteria.
- g. Scores on the Health Occupational Basic Entrance Test (HOBET)
- h. Personal interview for top tier candidates

A copy of the admissions application packet is included in the appendix.

Prerequisites:

Course*	Course Title	Credits
BIOL F111X	Human Anatomy and Physiology I	4
BIOL F 112X	Human Anatomy and Physiology II	4
BIOL F 240	Beginnings in Microbiology	4
CHEM F 103X	Basic General Chemistry and lab	4
CHEM F 104X	Beginning in Biochemistry: A survey of organic chemistry and biochemistry	4
PSY 101	Introduction to Psychology	3
HLTH 203	Science of Nutrition	3

* Students must earn a (2.0) C or better in each course, and an overall GPA of at least 2.5 to be considered for admission to the Dental Hygiene program.

Courses required for the A.A.S. in communication, computation and human services:

Course*	Course Title	Credits
COMM F 131X or COMM F 141X	Fundamentals of Oral Communications: Group Context Fundamentals of Oral Communications: Public Context	3
ENGL F 111x	Introduction to Academic Writing	3
ENGL F 211X or ENGL F 213X	Academic Writing about Literature or Academic Writing about Social or Natural Sciences	3
DEVM 105 or MATH at the 100-level or higher		3
+ SOC 100X	Individual, Society and Culture	3

* Students must earn a (2.0) C or better in each course, and an overall GPA of at least 2.5, to be considered for admission to the Dental Hygiene program.

+ Sociology must be taken as required by the Commission on Dental Accreditation.

4. Course Descriptions of required courses:**Prerequisite courses. These courses (or courses with equivalent content) are required to be on the transcript by CODA.****BIOL 111X 4 Credits****BIOL 112X 4 Credits****Human Anatomy and Physiology I and II (n)**

Integrated view of human structure and function for students in pre-professional allied health programs, biology, physical education, psychology and art. BIOL 111X covers cells, tissues and organs, skeletal and muscle systems, the nervous system and integument. BIOL 112X examines circulatory, respiratory, digestive, excretory, endocrine and reproductive systems. (Prerequisites: BIOL 111X for BIOL 112X. Recommended: High school biology, high school algebra, CHEM 105X-106X or CHEM 103X-104X, ENGL 111X.) (3 + 3) 111X Offered Fall, 112X Offered Spring

BIOL 240 4 Credits**Beginnings in Microbiology**

Fundamentals of microbiology. Survey of the microbial world, interactions between microbes and host, microbial human diseases, the environmental and economic impact of microorganisms. Provides background in basic and applied microbiology with emphasis on the role microorganisms play in human health and life. Materials fee: \$45. (Prerequisites: One course in high school or college-level biology required or permission of instructor. Recommended: One course in chemistry. Note: May not be used as a biology elective for a major in biological sciences.) (3 + 3) Offered As Demand Warrants

CHEM 103X 4 Credits**Basic General Chemistry (n)**

Fundamentals of chemistry including historical and descriptive aspects as well as basic mathematical concepts. Fulfills the laboratory part of the natural science requirement and prepares the students for CHEM 104X. Note: this course satisfies electric credit only. Material fee: \$60. (Prerequisite: Placement or concurrent enrollment in DEVM 105 or higher (3+3) Offered Fall

CHEM 104X 4 Credits**Beginnings in Biochemistry: A Survey of Organic Chemistry and Biochemistry (n)**

Fundamentals of chemistry as applied to biological systems. Bridges the gap between a general chemistry course and biochemical concepts of other health related -sciences. Recommended for health-science degree candidates and non-science majors interested in the central role of chemistry in life. May be used to meet the general laboratory science requirement or for preparing for chem. 105X. Materials fee:\$60. (Prerequisites: CHEM 103X or permission of instructor.) (3+3) Offered Spring

PSY 101 3 Credits**Introduction to Psychology (s)**

Principles of general psychology emphasizing natural science and social science orientation. Cultural, environment, heredity and psychological basis for integrated behavior; visual, audition and the other senses; motivation and emotion; basic processes in learning, problem solving and thinking; personality; psychological disorders--their prevention and treatment, and therapeutic strategies. Also available via Independent Learning or via television as a self-paced, computer-aided course. (3 + 0) Offered Fall, Spring

HLTH 203 3 Credits**Science of Nutrition**

Introduction to the principles of nutrition and its relationship to the life cycle. Focus on the importance nutrition plays in personal health and how to objectively evaluate nutritional intake using scientifically sound resources. Also available via Independent Learning. (3 + 0) Offered Fall, Spring

Courses required for the A.A.S. Degree in communication, computation and human relations**ENGL 111X 3 Credits****Introduction to Academic Writing**

Instruction and practice in written inquiry and critical reading. Introduction to writing as a way of developing, exploring and testing ideas. Concentration on research methods and techniques. Available via Independent Learning. (Prerequisite: Placement examination or DEVE 070.) (3 + 0) Offered Fall, Spring

ENGL 211X 3 Credits**Academic Writing about Literature**

Instruction in writing through close analysis of literature. Research paper required. Strongly recommended for English and other humanities majors. Also available via Independent Learning. (Prerequisites: ENGL 111X or its equivalent; sophomore standing recommended.) (3 + 0) Offered Fall, Spring

ENGL 213X 3 Credits**Academic Writing about the Social and Natural Sciences**

Instruction in critical reading and argumentative writing by reading and responding to essays from the social and natural sciences. Concentration on the research methods and techniques necessary to create an extended written argument. Also available via Independent Learning. (Prerequisites: ENGL 111X or its equivalent; sophomore standing recommended.) (3 + 0) Offered Fall, Spring

COMM 131X 3 Credits**Fundamentals of Oral Communication: Group Context**

Presentational speaking skills: individual and group. Includes verbal and nonverbal skills, critical thinking in selecting and organizing materials, audience analysis and speaking presentation. Group skills include task and relational interaction, required interdependence, working across cultural differences, group decision-making and shared logistics of presentation. Student evaluations are based on nationally normed speaking competencies. (3 + 0) Offered Fall, Spring

COMM 141X 3 Credits**Fundamentals of Oral Communication: Public Context**

Speaking skills for individual presentation. Includes verbal and nonverbal skills, critical thinking in selecting and organizing materials, audience analysis, informative and persuasive speaking, and actual presentations. Student evaluations are based on nationally normed speaking competencies. (3 + 0) Offered Fall, Spring

SOC 100X 3 Credits**Individual, Society and Culture (s)**

An examination of the complex social arrangements guiding individual behavior and common human concerns in contrasting cultural contexts. Also available via Independent Learning. (3 + 0) Offered Fall, Spring

DEVM 105 3 Credits**Intermediate Algebra**

Second year high school algebra. Operations with rational expressions, radicals, rational exponents, logarithms, inequalities, quadratic equations, linear systems, functions, Cartesian coordinate system and graphing. To matriculate to MATH 107X from DEVM 105 a grade of B or higher is required. Also available via Independent Learning. (Prerequisite: Grade of C or better in DEVM 050, ABUS 155 or appropriate placement scores. Prerequisite courses and/or placement exams must be taken within one calendar year prior to commencement of the course.) (3 + 0) Offered Fall, Spring

MATH 103X 3 Credits**Concepts and Contemporary Applications of Mathematics (m)**

Applications of mathematics in modern society. Topics include voting systems, probability and statistics and applications of graph theory in management sciences. Problem solving emphasized. Also available via Independent Learning. (Prerequisites: DEVM 105 or 106 or placement; or high school geometry and algebra II.) (3 + 0) Offered Fall, Spring

MATH 107X 4 Credits**Functions for Calculus (m)**

A study of algebraic, logarithmic and exponential functions; sequences and series; conic sections; and as time allows, systems of equations, matrices and counting methods. A brief review of basic algebra the first week prepares students for the rigor expected. The primary purpose of this course, in conjunction with MATH 108, is to prepare students for calculus. Note: Credit may be earned for

taking MATH 107X or MATH 161X, but not for both. Also available via Independent Learning. (Prerequisites: a grade of B or better in DEVM 105 or a C or better in DEVM 106; or two years of high school algebra and MATH 107X placement or higher.) (4.5 + 0) Offered Fall, Spring

MATH 108 2-3 Credits**Trigonometry (m)**

A study of the trigonometric functions. Also available via Independent Learning. (Prerequisite: MATH 107X or placement or concurrent enrollment in MATH 107X.) (2-3 + 0) Offered Fall, Spring

MATH 161X 3 Credits**Algebra for Business and Economics (m)**

Functions of one and several variables with attention to linear, polynomial, rational, logarithmic and exponential relationships. Geometric progressions as applied to compound interest and present value. Linear systems of equations and inequalities. Note: Credit may be earned for taking MATH 107X or MATH 161X, but not for both. (Prerequisites: DEVM 105 or 106; or two years of high school algebra and MATH 161X placement or higher.) (3 + 0) Offered Fall, Spring

Courses required for the AAS in Dental Hygiene**HLTH 150 4 credits****Dental Radiography**

Dental radiography includes safety in exposing, processing and mounting dental radiographs. Present hazardous materials handling, equipment operation and maintenance. Prepares students for the Dental Assisting National Board's radiology health and safety examination. Materials fee: \$125 (3 + 3) Offered Fall, Spring

DH F111 2 credits**Dental Anatomy, Embryology, and Histology**

Introduction to embryology and histology of the periodontal tissues. Includes discussion of dental accretions and cariology. Materials fee: \$90 (Prerequisite: Departmental permission required.) (2 + 0) Offered Fall

DH F 112 7 credits**Techniques I for Dental Hygienists**

A pre-clinical course introducing the basic dental hygiene procedures tot include data gathering, patient education, and basic instrumentation, Emphasis is placed on skill development in basic instrumentation and infection control. Materials fee: \$1695 (Prerequisite: Admission to the Dental Hygiene Program) (3 + 8) Offered Fall

DH F 114 2 credits**Anatomy of the Orofacial Structures**

Provides students with knowledge to perform technical skills within the oral cavity. In particular, those relating to dental screening and record-taking. Materials fee: \$150 (Prerequisite: Departmental permission required.) (2 + 0) Offered Fall

DH F 121 2 credits**Periodontics I**

Introduction to periodontal disease. Emphasis is placed on recognition of periodontal disease and treatment planning. (Prerequisite: Admission to the dental hygiene program.) (2 + 0) Offered Spring

DH F 122 4 credits**Techniques II for Dental Hygienists**

Introduces adjunctive techniques used in dental hygiene treatment. Basic manipulation of dental materials. Emphasis is placed on care of materials and restorations that are encountered intra-orally during dental hygiene treatment. Radiology lab provides opportunity to develop competence in exposing radiographs on patients under direct faculty supervision. Materials fee: \$356 (Prerequisite: Admission to the dental hygiene program.) (2 + 4) Offered Spring

DH F165 2 credits**Introduction to Dental Pharmacology**

Introduces the student to the general concepts of pharmacology, the nature of drug reactions, individual responses to drugs, principles of neuropharmacology, toxicology, anti-infective therapy, effect of drugs on cardiovascular, endocrine, and other body systems. Emphasis is placed on drugs used in dentistry. (Prerequisite: Departmental permission required.) (2 + 0) Offered Spring

DH F 181 4 credits**Clinical Practicum I**

Provides opportunity for the student to achieve clinical skill competency with individuals presenting themselves as periodontally healthy or with signs of gingivitis. Materials fee: \$1490 (Prerequisite: Admission to the dental hygiene program.) (0 + 0 + 12) Offered Spring

DH F 182 1 credits**Clinical Seminar I**

Discussion and evaluation of clinical experiences encountered in DH F 195. Emphasis is placed on review of treatment plans and case presentation. Introduces ethical and legal concerns of the dental hygiene profession. Guest speakers, patient management, and teamwork are emphasized. (Prerequisite: Admission to the dental hygiene program.) (2 + 0) Offered Spring

DH F 211 2 credits**Periodontics II**

Develops familiarity with current non-surgical and surgical techniques in the treatment of periodontal disease. Nutrition and immunology as it relates to periodontal diseases are discussed. Case presentations are made by students. (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0)or better .) (2 + 0) Offered Fall

DH F 212 3 credits**Techniques III for Dental Hygienists**

Advanced dental hygiene instruments and intraoral techniques. Provides for discussion of patients with special needs. Materials fee: \$353 (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better.) (1 + 4) Offered Fall

DH F 214 2 credits**Pathology of Oral Tissues**

Includes the signs, symptoms, contagion recognition of selected diseases of the oral cavity and systemic diseases that manifest themselves in the oral cavity. (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better or departmental permission required.) (2 + 0) Offered Fall

DH F 224 3 credits**Principals of Dental Health**

Provides a broad understanding of community dental healthy and dental epidemiology. Students develop and implement a basic community dental health project. (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better.) (3 + 0) Offered Spring

DH F 283 5 credits**Clinical Practicum II**

Provides opportunity for students to achieve clinical skill competency with individuals presenting themselves with mild to moderate periodontal disease. This course is conducted in a clinical setting with volunteer patients and individualized instruction. Materials fee: \$1529 (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better.) (0 + 0 + 15) Offered Fall

DH F 284 1 credit**Clinical Seminar II**

Discussion and evaluation of clinical experiences encountered in DH F 295A. Emphasis is placed on review of treatment plans and case presentations of patients exhibiting early periodontal disease. (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better.) (2 + 0) Offered Fall

DH F 285 6 credits**Clinical Practicum III**

Provides opportunity for students to achieve clinical skill competency with individuals presenting themselves with moderate to advanced periodontal disease. Learning occurs through student practice and individualized instruction. Materials fee: \$345 (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better.) (0 + 0 + 18) Offered Spring

DH F 286 1 credit**Clinical Seminar III**

Discussion and evaluation of clinical experiences encountered in DH F 295B. Emphasis is placed on review of treatment plans and case presentations of patients exhibiting early periodontal disease. (Prerequisite: Completion of all 100-level dental hygiene classes with a grade of C (2.0) or better.) (2 + 0) Offered Spring

DH F 310 3 credits**Oral Pain Control**

Examines pharmacology, armamentarium, anatomical and physiological consideration, administration techniques, and potential complication of local anesthetic. Analyzes pharmacology, techniques, medical contraindications, and management complications accompanying administration and monitoring of nitrous oxide. Materials fee: \$345 (Prerequisite: Completion of all 100-level dental hygiene classes with a C (2.0) or Current Alaska licensure in dental hygiene and departmental permission, Current certification in cardiopulmonary resuscitation (BLS) (1.5 + 3) Offered Fall

5. Requirements for Degree.

a. Sample course of study following completion of prerequisites, and admission to the dental hygiene program:

First Semester of First Year

HLTH 150	Dental Radiography and lab	4
DH F 111	Dental Anatomy Embryology & Histology	2
DH F 112	Techniques for Dental Hygienists	7
DH F 114	Anatomy of the Orofacial Structures	2

Second Semester of First Year

DH F 121	Periodontics I	2
DH F 122	Techniques II for Dental Hygienists	4
DH F 165	Introduction to Dental Pharmacology	2
DH F 181	Clinical Practicum I	4
DH F 182	Clinical Seminar I	1

First Semester of Second Year

DH F 211	Periodontics II	2
DH F 212	Techniques III for Dental Hygienists	3
DH F 214	Pathology for Oral Tissues	2
DH F 283	Clinical Practicum II	5
DH F 284	Clinical Seminar II	1
DH F 310	Oral Pain Control	3

Second Semester of Second Year

DH F 224	Principles of Dental Health	3
DH F 285	Clinical Practicum III	6
DH F 286	Clinical Seminar III	1

3-Year Sequence of course offerings

We anticipate enrolling our first class of students in spring of 2008. We will offer a 4-semester course of study including a summer session for this cohort only. This will allow the students to graduate in spring of 2009 and sit for their boards here in Alaska. The boards are only offered in Alaska following the spring semester.

Our second cohort will be admitted in fall of 2009, and our third in fall of 2010. Beginning in fall of 2010 we will be offering our full complement of classes to both first and second year students.

	Spring 2008	Summer 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011
HLTH F150	X			X	X	X	X	X
DH F 111	X				X		X	
DH F112	X				X		X	
DH F114	X				X		X	
DH F121		X				X		X
DH F122		X				X		X
DH F165	X			X		X		X
DH F181		X				X		X
DH F182		X				X		X
DH F211			X				X	
DH F212			X				X	
DH F214			X				X	
DH F224				X				X
DH F283			X				X	
DH F284			X				X	
DH F285				X				X
DH F286				X				X
DH F310			X				X	

b. Proposed general catalog layout

Dental Hygiene

Tanana Valley Campus
 College of Rural and Community Development
 (907) 455-2834 or (907) 455-2822
 fydh@uaf.edu
 www.tvc.uaf.edu/programs/health/dh

A.A.S. Degree

Minimum Requirements for the AAS: 69

The registered dental hygienist is a licensed oral health educator and clinical operator who uses preventive, educational, and therapeutic methods which aid individuals and groups to attain and maintain optimum oral health. Dental hygienists can work as clinicians, educators, researchers, administrators, managers, preventive program developers, consumer advocates, sales and marketing managers, editors, and consultants. Clinical dental hygienists may work in a variety of health care settings such as private dental offices, schools, public health clinics, hospitals, managed care organizations, correctional institutions, or nursing homes.

The Dental Hygiene Associate of Applied Science degree is a three-year endeavor comprising one year of science prerequisite courses and general education courses and two years of course work in dental hygiene. The program prepares graduates clinically and academically to take the National and Western Regional Examining Boards for licensure.

Application for obtaining an Alaska dental hygiene license requires information concerning illegal activity, crimes, hospitalization history regarding emotional or mental illness, drug addiction, alcoholism and contagious diseases. If these are issues for the applicant it is highly recommended the applicant contact the Alaska Department of Occupational Licensing or a similar government agency in any state in which the applicant wants to practice.

Some expenses beyond tuition generally include individual course lab fees, instruments, uniforms, student organization membership, graduation pin, immunizations, cost of Basic Life Support class, licensure fees, student health insurance and malpractice insurance for the Western Regional Examining Boards and professional liability insurance. Once enrolled as a dental hygiene student, the student can anticipate a four semester, 40-hour-per-week intensive endeavor. Some evening classes and clinics are scheduled.

The Dental Hygiene program has received initial accreditation from the Commission on Dental Accreditation of the American Dental Association, 211 East Chicago Avenue, Chicago, Illinois 60611, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education.

ADMISSION REQUIREMENTS

Admission to the dental hygiene program is competitive. Six students per year are accepted.

Acceptance is based on the following criteria:

- a. Completion of a UAF application
- b. Completion of a Dental Hygiene Program application
- c. Proof of immunity to rubella, rubeola, varicella, hepatitis A, hepatitis B, tetanus, diphtheria, and pertussis
- d. Evidence of freedom from tuberculosis by PPD or chest x-ray within the previous 6 months
- e. Current CPR certification for health care providers
- f. Completion of the required prerequisite and AAS requirement courses with a C (2.0) or better in each course, and an overall GPA of at least 2.5. GPA is considered in the admission criteria.
- g. Scores on the Health Occupational Basic Entrance Test (HOBET)
- h. Personal interview for top tier candidates

Prerequisite courses: (26 credits)

BIOL F111X	Human Anatomy and Physiology I	4
BIOL F 112X	Human Anatomy and Physiology II	4
BIOL F 240	Beginnings in Microbiology	4
CHEM F 103X	Basic General Chemistry and lab	4
CHEM F 104X	Beginning in Biochemistry: A survey of organic chemistry and biochemistry	4
PSY 101	Introduction to Psychology	3
HLTH 203	Science of Nutrition	3

Courses with equivalent content transferred from another University may be substituted for the above UAF courses.

A.A.S. required courses in communication, computation and human relations: (15 Credits)

ENGL 111X	Introduction to Academic Writing	3
ENGL 211 X or ENG 213X	Academic Writing about Literature or Academic Writing about Social or Natural Sciences	3
COMM 131X or COMM 141X	Fundamentals of Oral Communications: Group Context Fundamentals of Oral Communications: Public Context	3
DEVM 105 or MATH at the 100-level	Intermediate algebra	3
SOC 100X	Individual, Society and Culture	3

Additional information and a complete application packet is available at (907) 455-2834 or (907) 455-2822, fyd@uaf.edu, or www.tvc.uaf.edu/programs/health/dh. It is strongly recommended that interested students work with the Dental Hygiene advisor while preparing to apply to the program.

Major—A.A.S. Degree

1. Complete the general university requirements (see page 83).
2. Complete the A.A.S. requirements (see page 87).
Students should take SOC 100X to meet the human relations requirement for the AAS.
3. Complete the following program (major requirements)*

HLTH 150	Dental Radiography and lab	4
DH 111	Dental Anatomy Embryology & Histology	2
DH 112	Techniques for Dental Hygienists	7
DH 114	Anatomy of the Orofacial Structures	2
DH 121	Periodontics I	2
DH 122	Techniques II for Dental Hygienists	4
DH 165	Introduction to Dental Pharmacology	2
DH 181	Clinical Practicum I	4
DH 182	Clinical Seminar I	1
DH 211	Periodontics II	2
DH 212	Techniques III for Dental Hygienists	3
DH 214	Pathology for Oral Tissues	2
DH 224	Principles of Dental Health	3
DH 283	Clinical Practicum II	5
DH 284	Clinical Seminar II	1
DH 285	Clinical Practicum III	6
DH 286	Clinical Seminar III	1
DH 310	Oral Pain Control	3

*Students must earn a minimum of 75% in each class.

B. Program Goals

1. Brief identification of objectives and subsequent means for their evaluation

- a. Graduates of the Dental Hygiene program will have the knowledge, technical skills, the attitude, and professional demeanor for employment at the entry level of the dental hygiene profession.
- b. Graduates of the dental hygiene program will demonstrate academic and clinical proficiency necessary to succeed on national and regional examinations and obtain State of Alaska licensure.
- c. Graduates of the dental hygiene program will be prepared to perform occupationally related procedures in a variety of settings
- d. Graduates of the dental hygiene program will meet the occupational requirements of employers.

Evaluation of the Dental Hygiene program is achieved by graduates taking and passing national and regional dental hygiene exams and being licensed to practice dental hygiene. There will be surveys presented to employers of recent graduates requesting comments, graduates, and the dental community. A complete student outcomes assessment plan is presented in Section IX, Part E, of this document.

Evaluation of the program in response to the student outcomes assessment, national accreditation standards and other student and faculty input will be done each spring following graduation.

2. Relationship of program objective to “Purpose of the University”

The “Purpose of the University” as stated in the UAF 2010 Strategic Plan is to advance and disseminate “....knowledge through teaching, research, and public service with an emphasis on Alaska, the circumpolar North, and their diverse peoples. America’s Arctic University—promotes academic excellence, student success, and life-long learning.” Further, TVC’s core purpose is community-driven education. Our goal at TVC is to be Alaska’s first choice for quality career and technical education. TVC has developed a strategic plan to carry the unit through the year 2015.

The Dental Hygiene Program Mission Statement and Strategic Mission Statement is:

“To meet the oral healthcare needs of all Alaskans, The University of Alaska Tanana Valley Campus is committed to educating dental hygienists for entry into the profession and instilling in them a commitment to professional development and life-long learning.” The faculty at TVC Allied Health, together with the Dental Hygiene Advisory Committee, has developed the goals and student learning outcomes for the program that are outlined above, and are detailed in section IX, part E, of this document.

Thus, the proposed Dental Hygiene Program meets many of the purposes outlined above. The dental hygiene program represents an area of needed professional technical expertise that is science based. The program was proposed and developed after a community needs assessment was conducted, and in conjunction with a community advisory committee. In the program, students will develop critical thinking and diagnostic skills as well as technical and clinical skills with the accompanying demonstrated competencies. In order to remain licensed in the State of Alaska, dental hygienists must take continuing education classes that advance the practice of dental hygiene and encourage life-long learning and skill improvement.

3. Occupational / other competencies to be achieved.

The dental hygiene program is a competency-based program. Detailed information on the skills and competencies that students will master are provided in the goals and objectives of each course proposal, and follow the requirements of CODA.

Graduates of the AAS in Dental Hygiene will be required to sit for the ADA National Written Dental hygiene Board, Western Regional Examining Clinical Board and Western Regional Examining Board Anesthetic Written and Practical/Clinical Board. Graduates must pass all exams to be awarded a license to practice dental hygiene in the State of Alaska.

4. Relationship of courses to the program objectives

All of the courses in the Dental Hygiene program begin at a basic level and increase in difficulty through the two year program. All of the courses are related to the practice of dentistry and dental hygiene. The education requirements are very specific with a detailed list of specific knowledge and skills required to succeed professionally provided by CODA.

III. Personnel Directly Involved with Program

A. Faculty Involved

1. Rena Bower, CDA, RDH, BSOE, Assistant Professor, Dental Hygiene, Dental Hygiene Program Coordinator

Ms. Bower will be charged with advising students, scheduling classes, convening the dental hygiene advisory committee, identifying, recruiting, and mentoring adjunct instructors, developing an appropriate budget, evaluating the program annually, establishing the process for admissions and participating in the selection of applicants to the program, maintaining all accreditation paperwork and interfacing with CODA, and teaching within the program.

2. Marsha Sousa, PhD, Allied Health Programs Coordinator
Associate Professor

Dr. Sousa will oversee budgets, maintain outcomes assessment data and teach basic science courses appropriate to the degree.

3. Jenifer Filotei, CDA, Assistant Professor, Dental Assisting

Ms. Filotei will work with Ms. Bower to share the lab and classroom space, and will teach within the program.

B. Administrative and Coordinating Personnel

1. Debbie Burkhardt, Administrative Assistant, Dental Programs
2. Cheryl Allen, Administrative Assistant

C. Classified Personnel

none

IV. Enrollment Information**A. Projected enrollment/ present enrollment**

Proposed enrollment	12 full time students
1 st year enrollment	6
2 nd year enrollment	6

The Dental Hygiene program will begin with a cohort of 6 students in the spring of 2008. A second cohort will be admitted for fall of 2008, and the third cohort in fall of 2010.

B. How determined/ who surveyed/ how surveyed

Two factors are important in determining the number of students we will admit.

1. We have identified a modest and continuing need for additional dental hygienists in Fairbanks and interior Alaska. A survey of the dental community was completed in January of 2006. From the need established in that survey, we developed the proposal to begin this new program. The proposal has moved through the Allied Health Alliance (a cross-MAU group facilitated by the office of Karen Perdue, Vice-President for Health Programs), and has been developed in conjunction with UAA.
2. The clinical supervision requirements of CODA determine the number of students we can admit. Each student must have an operatory available in which to practice skill development and work on patients. We have only 6 chairs available. In addition, CODA determines the ratio of faculty to students: 1:6.

C. Minimum enrollment to maintain program for years 1, 2, 3, 4, and 5

Minimum enrollment will be six (6) students for years 1, 2, 3 (Academic years 08, 09, 10)

We will have both first and second year students beginning fall 2010, therefore minimum enrollment will be 12 students beginning yearly in academic year 2011.

D. Maximum enrollment

Maximum enrollment will be 12 students; six (6) students in their first year and six (6) students in their second year.

E. Special Restrictions on enrollments

All requirements for enrollment in UAF must be met.

Special requirements for admission to the dental hygiene program are as follows:

- a. Completing the prerequisite courses with a grade of 75% or better
- b. Results of the HOBET exam
- c. Application to the Dental Hygiene program
- d. Immunizations required
 - i. Interview for top tier candidates
 - j. Being admitted into the dental hygiene program

An application packet is attached in the appendix.

V. Need for Program

A. Required for other programs. In what way? How has this requirement been met to date?

The dental hygiene program is not required for any other programs at UAF or at any other MAU.

B. Employment market needs

1. Who was surveyed? How?

There has been a critical shortage of dental hygienists in Fairbanks and interior Alaska for more than 20 years, and the local dental community has advocated for the creation of a dental hygiene program at UAF since the early 1990's. In 1994, the Alaska Dental Society contracted with Registered Hygienists Phyllis Beemsterboer and Kathleen Lukken to conduct an evaluation of the need for dental hygiene education in Alaska. That assessment documented a clear need for dental hygiene education in Fairbanks. Despite the strength of the study, no hygiene program was developed. In the fall of 2005, Tanana Valley Campus contracted with Crosby and Associates, Inc, to conduct a local needs assessment. The results of the needs assessment were presented to the local dental community in January, 2006. Those results indicated a modest but continuing need for approximately six dental hygienists annually in the Fairbanks community. The conclusion of the survey was the need for four to six full time dental hygienists in the Fairbanks areas that was documented in the 1994 assessments report has not been met. There has been an increase in dentists practicing in the Fairbanks area of 25% than a decade ago. This means that there needs to be five to 7.5 more hygienists to meet the present needs, not addressing retirement or turnover. Projected needs by the dentists for the three – five years is ten hygienists. Extrapolating from this number to include dental office which did not participate in the survey but presumably employ hygienists at roughly similar rates increase the need to as high as 12 in the same 3-5 year period in the greater Fairbanks area.

The study did not address the need for hygienists in the Interior Region of Alaska; however, we are aware of a tremendous need to improve access to dental care in our rural communities. It is well-known that the need for oral health and dental hygiene care/services in rural Alaska areas is tremendous. A 1999 white paper produced by the southeast Alaska Regional Health Consortium documented the magnitude of the dental disease crisis experienced by Alaska Natives. Data from 1990-1999 Indian Health Services surveys revealed that Alaska Native children experience caries at a rate twice the national rate.

Tanana Valley Campus is part of the UAF's College of Rural and Community Development. TVC provides career and technical education, academic preparation, and lifelong learning programs. TVC is strategically located to promote the dental hygiene program for the local community as well as the rural communities, many of which are not accessible by road.

The challenge is to provide the training, knowledge, and skills as conveniently as possible to communities where the employment opportunities are and where the potential students live or are comfortable taking classes.

One Dental Hygiene program currently operates in Alaska, at the University of Alaska Anchorage. That program enrolls 12 students annually for the AAS degree. Increasing the capacity of the University of Alaska Anchorage's dental hygiene program does not meet the need in Fairbanks and Interior Alaska, as Anchorage has its own unmet need for dental hygienists and may well recruit all graduates of the their on-site program.

2. Job opportunities now, two, five and ten years from now. How were these predictions determined?

In 2002, the Alaska Department of Labor and Workforce Development (DOLWD) published workforce development projections through 2012. An Article based on this study in the Alaska Economics Trends predicts and increase of over 40% in the need for dental hygienists, one of the highest rates of anticipated need among the occupations traced by the state. 2012.

This takes into account that 16.5% of the dental hygienists in the state are currently age 50+, and that 11.8% of the dental hygiene positions are filled by non-resident workers. The Alaska Health Workforce Vacancy Study (August 2007), done by the UAA Alaska Center for Rural Health indicates that there are currently 14 urban and 17 rural vacancies for dental hygienists, representing a 3.6% and 10% vacancy rate respectively.

3. How have positions been filled to date?

Dental hygiene positions have been filled by advertising in the newspaper and by "word of mouth" as opportunities arise. Many dentists are advertising and recruiting, mostly unsuccessfully, from out of state. A chronic shortage remains, and in Fairbanks, the average wait for an appointment with a hygienist is 6 months due to the number of vacancies.

VI. Other

The cooperation and support of UAA and the Allied Health Alliance has been invaluable in examining how best to deliver dental hygiene education in Fairbanks and the Interior. Two years of study were invested in the developing the model for delivering this program. A further 3 semesters has been spent on external accreditation and academic program development. We anticipate that UAA and UAF will work together on any modification to curriculum and instruction in the coming years, and that students will be able to transfer between MAUs without penalty provided space is available.

The cost of Dental Hygiene education is substantial, and the proposed project would not be feasible if the dental teaching facility was not already in place. This teaching facility was funded through the Denali Commission, an organization that designates specific federal funds to enhance access to healthcare in Alaska.

VII. Resource Impact

A. Budget

See resource allocation form

B. Facilities/ space need

Complete, state of the art dental facilities are already constructed at the Tanana Valley Campus. The facilities were built in 2004 to accommodate the dental assisting program and in 2006, upgrades were completed for digital radiography. An additional room to provide administrative and reception functions for outpatient care is being remodeled in spring of 2008 with funds already committed to the Dental Hygiene program for FY08.

C. Credit Hour Production

This program will increase the credit hour production for the University of Alaska Fairbanks. This program will draw new students to the university by providing the opportunity to gain the knowledge and skills necessary to gain employment in the dental hygiene field. A student who completed all AAS requirements, prerequisites and dental hygiene courses at UAF would create 95 credit hours. Admitting 6 students per year to the dental hygiene program provides an additional 570 credit hours. It is anticipated that two to three times as many students as are accepted into the dental hygiene program will complete the prerequisite (26 credits) and AAS (15 credits) requirements. Roughly that means 456-680 additional credit hours.

D. Faculty

One additional faculty member has been hired in anticipation of the acceptance of the new dental hygiene program. Adjunct faculty will be hired as needed. Two of the courses required for the Dental Hygiene degree are already offered at UAF: Dental radiography and pharmacology. Current UAF faculty and class structure should be able to accommodate the additional students in the AAS requirement and prerequisite courses.

E. Library/ Media materials, equipment, and services

The Dental Hygiene program will have a minimal impact on the library. Diane Ruess has inventoried all the periodicals and texts that are currently available. Those resources, together with access to online resources, meet the current requirements for the program as approved by CODA. Should additional resources become necessary, we will work with Diane Ruess to find funding for those acquisitions.

Allied health currently has media smart carts for faculty use and computers available for student use.

VIII. Relation of Program to other Programs within the System

A. Effects on enrollment on elsewhere in the system

The Dental Hygiene program will not negatively impact other established programs within the UA system. In fact, UAA cannot currently meet the demand for training dental hygienists and turns away many qualified applicants each year. This program will alleviate some of the pressure on the UAA Dental Hygiene program. Currently, competition for admission to the UAA program is so high that

students must have almost a 4.0 average in order to gain admission. Development of this program at UAF will encourage students to remain in Fairbanks and fulfill the documented need for dental hygienists.

We anticipate a slight increase in the number of students obtaining prerequisites and AAS degree requirements at UAF. However, the current capacity in these classes should support the increased demand.

B. Does it duplicate/ approximate programs anywhere in the system? If so, what is the justification for the duplication?

Yes. UAA has had an accredited program in dental hygiene for almost 30 years. However, due to space limitations at UAA, that program is not able to grow. In addition, not all students seeking education in dental hygiene are able to transfer to Anchorage to fulfill their educational goals. While the need for dental hygiene care and dental hygienists in Fairbanks is documented, it is well known that the need for oral health and dental hygiene care/services in rural Alaska areas is tremendous. Much discussion within the Allied Health Alliance focused on where and how to increase the number of dental hygiene students. A separately accredited program at UAF was determined to best meet the needs of the students and the state. Due to the limited number of operatories at UAA, it was not possible to add students on the UAA campus. The cost of using the UAA accreditation to bring an outreach program to UAF was very similar to the cost of a separately accredited program at UAF. Therefore, the AHA requested that UAF initiate a dental hygiene program, separately accredited, and that UAA supply the curriculum to UAF, and advise UAF on all aspects of program development. It is anticipated that the UAA and UAF programs will remain closely aligned, but that each MAU will be able to respond to local MAU issues and local student needs. UAF will also seek to reach rural students so that they can complete their AAS requirements and prerequisites at their home campus moving to Fairbanks to complete their clinical training. It is thought that many rural students will be more comfortable in Fairbanks than Anchorage due to our smaller size and more rural focus.

C. How does the program relate to research or service activities?

1. Contributions to research or service?

By establishing a dental hygiene program in Fairbanks at TVC, we will meet the needs of the community by providing dental hygienists to fill the local need as well as encourage development of practice in the rural Alaska areas. Further, we will be operating a dental hygiene clinic that will be able to serve under-served low-income populations on a sliding scale fee system.

2. Benefits from research or service activities?

Access to dental hygiene care will become more readily available, reduction in the length of time patients/clients will have to wait for services and the availability of this specific education to the local community and students from rural areas are all benefits. The local dental community has asked for this program for at least 20 years. Many are now volunteering to donate their time to assisting in patient assessment in the program, teach within the program, and serve on the advisory committee. This kind of partnership with the community has to have multiple benefits

on all aspects of the university, from non-tangibles such as creating good will to the very-tangibles such as increased ability to secure federal grants.

IX. Implementation / Termination

A. Date of implementation

We plan to admit the first cohort of students in January, 2008.

B. Plans for Recruiting Students

1. Advertisements in the Daily News Miner/ TVC new announcements
2. Advertisements on the Alaska State Dental Hygiene web site
3. Advertisement in the Alaska Dental Association newsletter
4. Advertisement in the UAA student newspaper
5. Advertisement in the UAF student newspaper
6. TVC dental hygiene link on the web site

C. Plans for termination of the program

There is no plan to terminate the program. We foresee a continuing need to train dental hygienists.

D. Plans for phasing out program if it proves unsuccessful

Should the decision be made to discontinue the dental hygiene program, the students currently enrolled in the program would have the opportunity to complete their degree within the regular time frame. There would not be a new class enrolled at the completion of the courses for the existing students.

E. Assessment of the program

Dental Hygiene Program Academic Outcomes Assessment Plan

Mission Statement:

To meet the oral healthcare needs of all Alaskans, The University of Alaska Tanana Valley Campus is committed to educating dental hygienists for entry into the profession and instilling in them a commitment to professional development and life-long learning.

Dental Hygiene Program Goals	Student learning objectives	Assessment criteria and procedures	Implementation
1. Graduates of the Dental Hygiene program have the technical skills and professional demeanor to perform occupationally related procedures	1a. Students will demonstrate high quality work by demonstrating proficiency in academic and clinical classes.	1a. Students will maintain 75% or better on all exams and assignments in academic and clinical classes in Dental Hygiene Sciences, and by earning a C or better in all general education courses.	1a. Student files will contain evidence of all exams and graded work beginning with admission into the program. Records of prerequisite and general education courses will be maintained in the files, with transcribed grades.
	1b. Students will present a portfolio of work to the senior committee consisting of faculty and advisory committee members.	1b. Portfolios will demonstrate evidence of an understanding of the broad body of knowledge necessary to practice high-quality evidence-based dental healthcare, an understanding and adherence to ethics and practice standards, and will demonstrate professionalism in oral and written presentation.	1b. Copies of the portfolio documents, and committee members' responses to the portfolio will be retained in the student files. Successful presentation of the portfolio is required for graduation.
2. Graduates of the dental hygiene program will demonstrate academic and clinical proficiency necessary to succeed on national and regional examinations.	2. Students will take their national and regional exams promptly and will pass the exams with excellent marks.	2. Students will take their national and regional exams promptly and will pass the exams with excellent marks.	2. Records of scores and pass rates will be retained in the dental hygiene program offices.
3. Graduates of the dental hygiene program will be prepared to	3. Students will present evidence of experience in various settings,	3. Students will be able to document successful work in a variety of settings,	3. Records of work in various settings and documentation of work in all procedures

perform occupationally related procedures in various settings.	experience in performing various procedures, and documentation of working with patients of varying degrees of oral health.	and with a diverse population.	will be retained in dental hygiene program offices.
4. Graduates of the program will meet the occupational requirements of employers	4a. Graduates will be accepted into dental hygiene positions and their employers will find their work acceptable	4a. All program graduates who seek dental hygiene positions will find employment within 6 months of beginning their search.	4a. Dental hygiene faculty and staff will keep records of the graduates' employment.
	4b. Employers of UAF Dental Hygiene graduates will indicate satisfaction with their academic and clinical skills, and with their professional demeanor and ethical standards.	4b. Surveys will be sent to all employers of program graduates in spring of each year.	4b. Survey responses will be summarized each year, and records will be kept in the dental hygiene program offices.

X. Regents Guidelines Summary form:

MAU: University of Alaska Fairbanks
Tanana Valley Campus
College of Rural and Community Development

Title: AAS, Dental Hygiene

Target admission date: Spring 2008

The Tanana Valley Campus, College of Rural and Community development, University of Alaska Fairbanks, requests approval of an Associate of Applied Science in Dental Hygiene to be implemented in the Spring Semester, 2008.

The dental hygiene program is an intensive, science-based and competency-based degree program. Courses proposed for the degree prepare the graduate with the knowledge, skills, attitude, and values to take and pass national and regional dental hygiene written and clinical exams and be licensed in the State of Alaska. The program received initial accreditation through the Commission on Dental Accreditation in August of 2007.

How does the program relate to the *Education* mission of the University of Alaska and the MAU?

TVC's mission is to provide community-driven education. For more than 20 years, the Fairbanks dental community has been asking UAF to establish a dental hygiene program here in Fairbanks to increase the number of dental hygienists who will remain in the community and serve the dental needs of Fairbanks and Interior Alaska. The proposed AAS in Dental Hygiene would do that. Further, we plan to engage our rural campuses in providing the AAS requirements and the prerequisite courses that will allow rural Alaskan students to compete effectively for admission to the Dental Hygiene program. This science-based, competency-based program provides high quality vocational and technical skills that meets the national standards of the Commission on Dental Accreditation, and will allow graduates to sit for the national and western region exams to become licensed Dental Hygienists.

The decision to initiate a dental hygiene program at the University of Alaska Fairbanks was made after gaining input and advice from the local Fairbanks dental community, the Allied Health Alliance, the administrators of the University of Alaska Fairbanks, and Statewide Administration. An external needs survey of professionals, including dental hygienists and dentists, was conducted by Crosby and Associates in Fall of 2005. That survey confirmed the results of a previous survey (early 1990's), and demonstrated a continuing need for additional dental hygienists in the Fairbanks area. A 1999 white paper produced by the southeast Alaska Regional Health Consortium documented the magnitude of the dental disease crisis experienced by Alaska Natives. Data from 1990-1999 Indian Health Services surveys revealed that Alaska Native children experience caries at a rate twice the national rate, and that at least a portion of that problem is attributable to a lack of dental professionals, including hygienists, in rural Alaska. Finally, a group of dental professionals serves as a Dental Hygiene Advisory Committee to the TVC Dental Hygiene Program.

What *State Needs* met by this program.

An article based on Alaska Department of Labor and Workforce Development (DOLWD) statistics in the October, 2004 *Alaska Economic Trends* predicts an increase of over 40% in the need for dental hygienists, one of the highest rates of anticipated need among the occupations tracked by the state. A

related DOLWD report projects 22 annual openings for dental hygienists statewide. The site specifies an average entry-level wage of \$38,960 and a mean salary of \$63,810.

Despite the documented need for hygienists and hygiene services around the state, there is currently only one dental hygiene program at UAA, which has 12 graduates per year. It is not possible to increase the cohort at UAA due to limited operatory capacity. In addition, increasing the capacity of the UAA dental hygiene program does not meet the need for the Interior Alaska and Fairbanks as Anchorage has its own unmet need for dental hygienists and Anchorage may well recruit all the graduates from their own program which would leave the most underserved areas still in need of care.

What are the Student opportunities and outcomes? Enrollment projections?

The proposed program would admit 6 students per cohort, and by fall of 2010 will have both a first year and second year cohort studying at the same time. Keeping the cohort at 6 students will meet several needs: 1) one student per operatory is required by CODA, and we have only 6 operatories; 2) a faculty:student ratio of 1:6 for all lab and clinical experiences; and 3) we estimate that 6 graduates per years will come close to meeting the needs of Fairbanks and Interior Alaska for dental hygienists.

Vacancy surveys conducted by the UAA Alaska Center for Rural Health indicate that in August 2007 there were approximately 14 vacancies in urban communities and 17 vacancies in rural Alaska. We anticipate that all graduates will be able to obtain employment.

Describe Research opportunities:

We do not anticipate establishing research programs in association with this AAS degree program.

Describe Fiscal Plan for development and implementation:

Funding to support the needs surveys, the development of the application for initial accreditation through the Commission on Dental Accreditation, and the hiring of a program director was provided by a combination of funds from TVC, CRCDC, and the office of the Vice President for Health Programs. A funding request to continue support of the program was placed in the FY 08 budget, however, SB 137 rather than general fund money was provided for FY08. Support for the continuation of the program was submitted on the cross-MAU request for Allied Health Program funding for FY09. It was ranked highest of the 4 proposals submitted by UAF. We have received assurances from the Chancellor's Cabinet, and from Karen Perdue, the Vice-President for Health Programs, that this program is a high priority and that funding (\$240K) is assured for the FY09 budget.

Funding for lab supplies and equipment will be borne by the students via lab fees. We anticipate that members of the local dental community will continue to support the program by volunteering their time to train students, provided some equipment and supplies, and developing scholarship support for the students. Further, the Alaska Dental Society is generating an endowment fund for all dental programs within the state.

Appendices

A. Evaluation of the Need for Dental Hygienist Training for the Greater Fairbanks Area and Interior Region, Alaska, 2006

I. Executive Summary

A 1994 report entitled “Preliminary Evaluation of the Dental Hygiene Education Needs in Alaska,” prepared for the University of Alaska Anchorage (UAA) and the Alaska Dental Society (ADS), documented that “for several years in the state of Alaska, the need for dental hygienists in the private sector has been greater than the supply.” Over a decade later, the needs of the greater Fairbanks area for dental hygienists remain unmet. Additionally, the need for dental services for Alaska’s rural residents – and for the dental professionals to provide those services – is widely acknowledged to be tremendous. UAA has had a dental hygiene training program since the mid-1970s; they graduate 12 students per year and do not foresee expanding. In 2005, Tanana Valley Campus (TVC) of the University of Alaska Fairbanks (UAF) elected to update the assessment of the need for a dental hygiene training program. It did so with support and encouragement from the Alaska Dental Society (ADS) and several local dentists. The update involved reviewing two programmatic options to meet the need: expand UAA’s program for delivery to the Fairbanks area, or develop a new, separately accredited program at UAF.

TVC’s assessment consisted of review of the 1994 study, research into projected state and regional employment trends, and a survey of dentists practicing in Fairbanks, many of whom have experience working in rural Alaska. The survey was mailed to each of the 50 dentists in the Fairbanks telephone listing. In the end, 30 (60%) of the dentists contacted participated in the survey and eleven attended a follow-up meeting to “ground truth” the results.

In 2002, the Alaska Department of Labor and Workforce Development (DOLWD) published workforce development projections through 2012. An article based on this study in *Alaska Economic Trends* predicts an increase of over 40% in the need for dental hygienists, one of the highest rates of anticipated need among the occupations tracked by the state. Graduates from the UAA program will meet one-third to one-half of this need. Fairbanks dentists anticipated employing 18 – 22 hygienists in the coming 12 months, and 37- 40.5 (total) in the coming 3-5 years, an increase of 48 – 54% between the two periods. Fairbanks dentists demonstrated considerable interest in the program at the community meeting.

A key element in assessing program benefits and costs is the existence of a new state-of-the-art dental training facility in TVC’s Allied Health Regional Learning Center, located in Tanana Valley Campus Center (7th and Barnette Streets in Fairbanks). This facility has six operatories, a materials lab, a dental radiography suite, and adjacent classrooms and computer labs. It is currently used for training dental assistants but has the capacity to be used more intensively for a dental hygiene program. Moreover, the addition of a dental hygienist training program at TVC could well complement training in other areas such as medical/dental office assistants and applied business students.

Comparing *start-up* and *annual operating costs* for the two program options -- from UAA or at UAF -- depends on instructional and personnel decisions yet to be made. All things considered, *starting up* the UAA option would cost about \$25, 000 less than, or about \$70,000 more than, the UAF option, depending on the instructional method used for distance delivery and assuming UAA uses TVC’s

training facility. Using the same assumption, the *annual operating costs* of the UAA option would be roughly equivalent to a new program at UAF. Of course, cost is not the sole criterion upon which such a programming decision would be made.

TVC is well positioned to meet training needs of Alaska's Interior and northern areas as it develops into a regional training center. In developing a dental hygiene program, it would benefit from UAF's many years of experience in delivering programs that meet the needs of rural students.

Recommendations

1. Respond to the long-documented need in the greater Fairbanks area with a high-quality dental hygiene program that meets the local and regional needs, while taking fully into account the issue of program *scale*: the number of new hygienists needed on an annual basis is consistent but not huge.
2. Actively engage Fairbanks and Interior region dentists in program development and implementation. Explore how best to utilize TVC's training facility and interested dentists as possible adjunct faculty. For efficiency, seek linkages between a dental hygiene program and opportunities for training and education in related TVC programs (e.g., dental assistants and medical/dental office training) and for professional development in the dental community.
3. Recruit as selectively as possible (using accreditation-mandated criteria) so that the program optimizes a small number of student slots with satisfactory placements in the workforce.
4. When considering the relative merits of the UAA- and UAF-accredited program options, consider cost as one among many variables, including delivery flexibility to meet student needs.
5. If the decision is made for a UAF-accredited program, build on the present educational and training "pipeline" to and from rural villages, i.e., use the established admissions and student services network for recruitment, UAF's branch campuses to deliver program prerequisites and initial courses in an effective way, UAF's dorm and housing options to support retention, etc.
6. In the effort to meet regional and rural needs, consider reserving a small number of student slots for rural students, and seek help from rural-based organizations in recruiting optimally prepared students and in placing them in employment upon program completion.
7. Specifically enlist ideas and help from IHS-experienced Fairbanks dentists regarding innovations and options that might help meet rural needs.
8. Regardless of the outcome regarding the UAA and UAF options, expand communication with the Alaska Native Tribal Health Consortium to make them aware of the program and the related regional training opportunities.
9. Act on the interest of Fairbanks and Interior region dentists and hygienists in the Program Advisory Committee for dental health programs and maintain this as an active and involved committee.

B. Application materials for the Dental Hygiene Program

The following materials are posted on the TVC website, and follow:

1. Disclaimer letter
2. Application form
3. Immunization for
4. List of prerequisite and AAS requirement courses in communications, computation and human relations