

# Dental Sciences

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Chair, IAGD Director, and Associate Professor: Crawford

IDEP Director and Assistant Professor: Ybarguen

IDEP Faculty: Polarski

## Certificate in Idaho Dental Education Program (IDEP)

The Department of Dental Sciences administers the Idaho Dental Education Program (IDEP) for pre-doctoral dental students, and the Idaho Advanced General Dentistry Residency (IAGD) as a postdoctoral program.

The Idaho Dental Education Program is designed to provide residents of Idaho with access to a high quality dental education as if Idaho had its own dental school. The IDEP program is fully accredited as a Satellite Program of Creighton University School of Dentistry by the American Dental Association. The program involves a first year curriculum at Idaho State University in Pocatello, followed by completion of the second through fourth years at Creighton University in Omaha, Nebraska. Students completing the four year program receive the Doctor of Dental Surgery (D.D.S.) degree and are eligible to take the licensure examinations necessary to become a practicing dentist. Students may also elect to pursue advanced training through residencies or specialty programs, eventually becoming board certified in one of the recognized dental specialties.

There are eight positions available for Idaho residents. Applicants to the program must have completed the necessary prerequisites in English, Biology, Inorganic Chemistry, Organic Chemistry, Physics, and other requirements as outlined in the Department of Dental Science Bulletin. In addition to fulfilling the minimal prerequisites, most students accepted into the program will have a bachelor's degree at the time of entry into IDEP. Occasionally, some exceptional students who have completed the junior level (upper division) of college course work are admitted into the program.

Students are encouraged to work closely with their pre-dental academic advisor in making course selections that fulfill dental school and degree completion requirements.

Formal application for admission to the IDEP program follows the guidelines printed in the Department of Dental Sciences Bulletin and the Creighton University School of Dentistry Bulletin. The application process involves: taking the Dental Aptitude Test (DAT), completion of the American Dental Education Association Application Service centralized application, the Creighton Supplemental Application, and the IDEP Residency Certification Form. Although the application process can be completed as late as January 1 of the year the student plans to enter the program, earlier application is strongly encouraged to allow adequate time for completion of admission requirements and consideration by the admission committee.

### IDEP PROGRAM OUTCOMES:

Students, upon program completion at Creighton University, will:

1. demonstrate appropriate ethical reasoning and professional responsibility.
2. demonstrate appropriate problem solving skills relative to comprehensive dental patient care.
3. demonstrate appropriate treatment planning for all patients;
4. enhance oral and general health of dental patients within the community.
5. demonstrate appropriate management of periodontal issues.
6. demonstrate appropriate management of endodontic issues.

7. demonstrate appropriate management of oral, bone, occlusal and temporomandibular disorders.
8. demonstrate appropriate management of oral surgical procedures.
9. demonstrate appropriate management of dental emergencies.
10. restore defective and/or missing teeth to appropriate form and function.

Further information concerning the program, admission requirements, Bulletins, and Residency Certification forms can be obtained by contacting the program at the following address:

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## Idaho Advanced General Dentistry Residency Program (IAGD)

The Department of Dental Sciences sponsors the Idaho Advanced General Dentistry Residency. The goal of the program includes increasing the knowledge and clinical skills of the general dentist beyond that achieved in the doctoral education. Through an integrated multidisciplinary learning environment, residents are able to increase their competence in the application of modern standards of care and practice management.

This one-year residency focuses on providing comprehensive care in a variety of clinical settings, emphasizing rural, under-served, and at-risk populations. Residents also receive training with patients who have emergency or episodic needs. A certificate is awarded upon the successful completion of the program.

The IAGD is fully accredited by the American Dental Association Commission on Dental Accreditation until 2022.

### IAGD Program Outcomes:

RESIDENTS, UPON PROGRAM COMPLETION, WILL:

1. effectively and safely manage the emergency, episodic, apprehensive, and comprehensive needs of patients.
2. satisfy requirements for the Certification in IV Sedation.
3. confidently and competently coordinate and provide care for patient with special needs including those who are indigent, medically challenged, developmentally disabled, or otherwise would not have access to regular dental care.
4. apply Principles of Professionalism and Ethics in all matters of daily practice;
5. value the importance of Continuing Dental Education and professional growth in their trajectory as a professional.
6. demonstrate effective leadership and management of Dental Team personnel with an emphasis on Team collaboration, development, and constructive Team assessment.

Further information concerning this program, e.g., admission requirements, forms, etc., can be obtained by contacting the Program Director.

## Certificate in Idaho Dental Education Program (IDEP)

Code	Title	Credits
<b>Required Basic Science Courses</b>		
BIOL 5500	Oral Histology and Embryology	3
BIOL 5500L	Oral Histology and Embryology Lab	0
BIOL 5519	Mammalian Histology	4
BIOL 5519L	Mammalian Histology Lab	0
BIOL 5532	Biochemistry	3
BIOL 5540	Human Gross Anatomy	4
BIOL 5540L	Human Gross Anatomy Lab	0
BIOL 5546	Selected Topics in Physiology	1
BIOL 5550	Head and Neck Anatomy	4
BIOL 5550L	Head and Neck Anatomy Lab	0
BIOL 5555	Pathogenic Microbiology	3
BIOL 5560	Neuroscience	4
BIOL 5568	Oral Microbiology	1
<b>Required Dental Science Courses</b>		
IDEP 5513	Dental Anatomy Lecture I	1
IDEP 5514	Dental Anatomy Laboratory	3
IDEP 5515	Dental Materials Science I	2
IDEP 5517	Interpersonal Relationships and Communication	1
IDEP 5523	Preventative Dentistry	2
IDEP 5525	History of Dentistry	1
IDEP 5526	Community Dentistry Field Experience	1
IDEP 5533	Oral Hygiene Technique	1
IDEP 5534	Dental Materials Science II	3
IDEP 5535	Occlusion Laboratory	1
IDEP 5544	Values and Ethics	1
IDEP 5554	Occlusion Lecture	1
IDEP 5563	Dental Radiology I	1
IDEP 5564	Dental Radiology Technique	1
NTD 5595	Dental Nutrition	1
<b>Optional Dental Science Course</b>		
IDEP 6617	Extramural Dental Education Program	2

### ID Adv General Dentistry Prog Courses

#### *IAGD 5599 Experimental Course: 1-6 semester hours.*

This course is not described in the catalog. The course title and number of credits are announced in the class schedule by the scheduling department. Experimental courses may be offered no more than three times. May be repeated.

#### *IAGD 6610 General Dentistry Practicum I: 12 semester hours.*

Supervised provision of general dental services with emphasis on increasing skills in routine general dental procedures and introduction to selected specialty procedures. Course may include periodic lectures on selected topics. PREREQ: Acceptance into IAGD program.

#### *IAGD 6620 General Dentistry Practicum II: 12 semester hours.*

Continued provision of general dental services with emphasis on increasing skills in advanced general dental procedures and completion of selected specialty procedures. Course may include periodic lectures on selected topics. PREREQ: IAGD 6610.

#### *IAGD 6624 Dental Practice Management I: 1 semester hour.*

Continuing experiential course in dental practice management. Enrollees will participate in aspects of the management of the AEGD program's dental clinic. PREREQ: Acceptance into the IAGD program.

#### *IAGD 6625 Dental Practice Management II: 1 semester hour.*

Continuing experiential course in dental practice management. Enrollees will participate in aspects of the management of the AEGD program's dental clinic. PREREQ: IAGD 6624.

#### *IAGD 6626 Dental Practice Management III: 1 semester hour.*

Advanced course in dental practice management. Enrollees will participate in all aspects of the management of the AEGD program's dental clinic. PREREQ: IAGD 6625.

#### *IAGD 6630 Dental Implantology I: 1 semester hour.*

A coordinated lecture, laboratory and clinical experience in treatment planning, placement and restoration of dental implants. This course emphasizes the theory and basic biology of dental implants. PREREQ: Acceptance into the IAGD program.

#### *IAGD 6631 Dental Implantology II: 1 semester hour.*

Continuing lecture, laboratory and clinical experience in treatment planning, placement, restoration and maintenance of dental implants. This course emphasizes problem solving and incorporation of implants in general dental practice. PREREQ: IAGD 6630.

#### *IAGD 6632 Dental Implantology III: 1 semester hour.*

Continuing lecture, laboratory and clinical experience in treatment planning, placement, restoration and maintenance of dental implants. This course emphasizes problem solving and incorporation of implants in general dental practice. PREREQ: IAGD 6631.

#### *IAGD 6635 Dental Medicine Seminar I: 1 semester hour.*

Participation in the ISU Family Medicine residents' seminar series covering topics of internal and specialty medicine. PREREQ: Acceptance into the IAGD program.

#### *IAGD 6636 Dental Medicine Seminar II: 1 semester hour.*

Continuing participation in the ISU Family Medicine residents' seminar series covering topics of internal and specialty medicine. PREREQ: IAGD 6635.

#### *IAGD 6637 Dental Medicine Seminar III: 1 semester hour.*

Continuing participation in the ISU Family Medicine residents' seminar series covering topics of internal and specialty medicine. PREREQ: IAGD 6636.

#### *IAGD 6640 Dental Conscious Sedation I: 2 semester hours.*

Integrated lecture and clinical experience in safe and efficacious delivery of conscious sedation. The two-semester experience is designed to fulfill the ADA guidelines. PREREQ: Acceptance into the IAGD program.

#### *IAGD 6641 Dental Conscious Sedation II: 2 semester hours.*

Continuing lecture and clinical experience in safe and efficacious delivery of conscious sedation. PREREQ: IAGD 6640.

#### *IAGD 6645 General Dentistry Videoteleconference I: 4 semester hours.*

Participation in the weekly two-way videoteleconference general dentistry series originating from Lutheran Medical Center in Brooklyn, NY, designed for AEGD programs. PREREQ: Acceptance into the IAGD program.

#### *IAGD 6646 General Dentistry Videoteleconference II: 4 semester hours.*

Continuing participation in the weekly two-way video-teleconference general dentistry series originating from Lutheran Medical Center in Brooklyn, NY, designed for AEGD programs. PREREQ: IAGD 6645.

#### *IAGD 6647 General Dentistry Videoteleconference III: 3 semester hours.*

Continuing participation in and presentation for the weekly two-way video teleconference general dentistry series originating from Lutheran Medical Center in Brooklyn, NY, designed for AEGD programs. PREREQ: IAGD 6646.

**IAGD 6650 Dental Literature Review I: 1 semester hour.**

Critical review of current and historical dental literature in general dentistry and selected recognized specialty areas of dentistry. PREREQ: Acceptance into the IAGD program.

**IAGD 6651 Dental Literature Review II: 1 semester hour.**

Continuing review of current and historical dental literature in general dentistry and selected recognized specialty areas of dentistry emphasizing outcomes and parameters of care. PREREQ: IAGD 6650.

**IAGD 6699 Experimental Course: 1-6 semester hours.**

This course is not described in the catalog. The course title and number of credits are announced in the class schedule by the scheduling department. Experimental courses may be offered no more than three times. May be repeated.

**Idaho Dental Educ Prog Courses****IDEP 5513 Dental Anatomy Lecture I: 1 semester hour.**

Nomenclature, chronology and methods of designation of human teeth. Form, size and contour of the teeth, including external and internal anatomy of the permanent and deciduous dentitions, intertooth relations and occlusion. COREQ: IDEP 5514.

**IDEP 5514 Dental Anatomy Laboratory: 3 semester hours.**

Carving of plaster teeth larger than average measurements and carving of wax teeth to natural size. Mounting of study casts on a functional articulator and waxing of teeth in occlusion. COREQ: IDEP 5513.

**IDEP 5515 Dental Materials Science I: 2 semester hours.**

Composition, properties and application of the materials used in dentistry. Basic information on the design of preparatory work necessary for the mouth incident to the reception of these materials.

**IDEP 5517 Interpersonal Relationships and Communication: 1 semester hour.**

To assist their orientation and adjustment to professional education, freshmen will participate in group introductions followed by a discussion on interpersonal relationships with classmates, administrators, faculty, and staff; dealing with stress; and establishing study habits.

**IDEP 5523 Preventative Dentistry: 2 semester hours.**

Introducing the philosophy and need for preventive dentistry by developing the student's knowledge of and skills for effective oral hygiene. Concepts of self motivation, knowledge of dental diseases and abnormalities; application of the principles of flouridation, nutrition, patient motivation, and home care.

**IDEP 5525 History of Dentistry: 1 semester hour.**

To acquaint the student with the history of dentistry from ancient times to present, emphasis is placed upon contributions by individuals and groups of individuals leading to the current status of dentistry in the United States.

**IDEP 5526 Community Dentistry Field Experience: 1 semester hour.**

Designed to acquaint students with area health problems and with area health services and agencies. Field experience is gained during dental health and/or career presentations in public schools. To provide a variety of experiences, visits are made, for example, to the chronically ill, aged, or handicapped; to water purification facilities; to Indian groups.

**IDEP 5533 Oral Hygiene Technique: 1 semester hour.**

Introduction to the instruments and their usage in performing a complete scaling prophylaxis of the teeth. Periodontal charting and instrument sharpening techniques are also performed. Didactic, laboratory, and clinical introduction.

**IDEP 5534 Dental Materials Science II: 3 semester hours.**

Continuation of DENT 5515. PREREQ: IDEP 5515.

**IDEP 5535 Occlusion Laboratory: 1 semester hour.**

Various exercises simulating clinical diagnostic and treatment procedures are employed to exemplify principles of maxillomandibular relationships. COREQ: IDEP 5554.

**IDEP 5544 Values and Ethics: 1 semester hour.**

Designed to identify and understand one's own ethical decision-making processes and the relationship of religion with values and ethics. Students will discuss the areas of value of care for people as individuals, challenges of personal and professional opportunities, code of ethics of the ADA and dental care delivery systems.

**IDEP 5554 Occlusion Lecture: 1 semester hour.**

Basic principles of maxillomandibular relationships, static and functional, as related to the occlusal surfaces of the teeth. COREQ: IDEP 5535.

**IDEP 5563 Dental Radiology I: 1 semester hour.**

History, theory and application of ionizing radiation resulting in radiography of the oral structures including exposure and developing parameters along with basic interpretation. COREQ: IDEP 5564.

**IDEP 5564 Dental Radiology Technique: 1 semester hour.**

Practical experience in exposing and developing dental radiographs. The course will include techniques required to complete a diagnostic full mouth series, bitewing films and panoramic radiographs. COREQ: IDEP 5563.

**IDEP 5565 Dental Radiology II: 1 semester hour.**

History, theory, and application of radiographic methods in dentistry including cephalometric, panoramic, and digital modalities. COREQ: IDEP 5563 and IDEP 5564.

**IDEP 5566 Medical Chemistry for Dental Students: 3 semester hours.**

Provide dental students the understanding of biochemical components of the body with primary emphasis upon the structure, function, and synthesis of the macromolecular components of cells and tissues. The roles of proteins, nucleic acids, lipids and saccharides in metabolic processes and regulation are examined along with the interrelationships among carbohydrates, lipids, amino acids, purines and pyrimidines. A particular emphasis is made in applying these principles to the treatment of dental patients. PREREQ: Student must be a participant in the Idaho Dental Education Program to be accepted.

**IDEP 5599 Experimental Course: 1-6 semester hours.**

This course is not described in the catalog. The course title and number of credits are announced in the class schedule by the scheduling department. Experimental courses may be offered no more than three times. May be repeated.

**IDEP 6617 Extramural Dental Education Program: 2 semester hours.**

Community clinical experience at the ISU dental clinic. Under direct supervision, dental students observe and participate in total patient care and office management while serving Idaho residents who would not normally receive dental care.

**IDEP 6699 Experimental Course: 1-6 semester hours.**

This course is not described in the catalog. The course title and number of credits are announced in the class schedule by the scheduling department. Experimental courses may be offered no more than three times. May be repeated.