





**Basic Biomedical Science 48 Credits****ICPY 190 Applied Medical Physics 2 (2-0-4)**

Anthropometry, equilibrium of forces, torque, elasticity of material, rotation, moment of inertia, angular momentum, fluid mechanics, buoyancy, viscosity, blood circulation, surface tension, capillary, osmosis, lung expansion, heat in the body, muscle, sound and response, ultrasonic wave, optical instruments, analytical instruments, fiber optics, electricity, X-ray, radioactivity and thermodynamics, and theoretical physics.

**ICCH 190 Chemistry for Dentistry 2 (2-0-4)**

Atomic structure, chemical bonding, gases and the kinetic molecular theory of gases, phase equilibria, solutions and colloids, chemical thermodynamics, chemical kinetics, ionic equilibria, electrochemistry. Molecular structure and properties of organic compounds, classification and nomenclature of various functional groups, stereochemistry, stereoisomers and their optical activities, synthesis, reactions and identification of alkanes, alkenes, alkynes, aromatic hydrocarbons, halides or organohalogen, alcohols, phenols, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives and amines. Molecular structure and properties of biomolecules: carbohydrates, proteins, lipid and nucleic acids.

**ICCH 191 Chemistry Laboratory for Dentistry 1 (0-3-1)**

Experiments of general chemistry and basic organic chemistry, e.g., errors, significant numbers, precision and accuracy, preparation of solution, acid-base titration, use of models for stereochemistry of organic substances, chemical equilibria, rate of reaction, redox reaction, solubility classification and reactions of hydrocarbons, reactions of alcohols and phenols, reactions of aldehydes and ketones, reactions of carboxylic acids and derivatives, reactions of amines.

**DTIS 201 Embryology 1 (1-0-2)**

Gametogenesis, fertilization, development from fertilization to birth, development of organ systems and congenital malformations.

**DTIS 202 Gross Anatomy I 3 (2-3-5)**

General anatomical structures, bones, joints, skull, anatomy of head and neck, oral cavity, salivary glands, nose and paranasal sinuses, meninges and venous sinuses, peripheral and autonomic nervous systems, structures of head related to local anesthesia.



<b>DTIS 221</b>	<b>Neuroanatomy</b>	<b>3 (2-3-5)</b>
	Anatomy of central nervous system, blood supply, cerebrospinal fluid pathway and some neurological pathology.	
<b>DTIS 222</b>	<b>Microanatomy II</b>	<b>2 (1-3-3)</b>
	Microanatomy of blood and lymph vessels, lymphatic tissue and organs, skin, organs of respiration, blood circulation, alimentary, urinary, reproduction and endocrine systems.	
<b>DTIS 223</b>	<b>Cariology I</b>	<b>2 (1-2-3)</b>
	Etiology of dental caries, pathogenesis, process of the disease in morphological, biochemical, histopathological, microbiological and immunological aspects, biological tests for caries risk assessment.	
<b>DTIS 224</b>	<b>Essential Immunology in Dentistry</b>	<b>2 (2-0-4)</b>
	Cellular basis of immune response, innate immunity, humoral immunity, cell-mediated immunity, mucosal immunity, antigen-antibody reactions, immunity to infections, hypersensitivity reactions, autoimmunity and autoimmune diseases, transplantation, tumor immunology, clinical applications of immunology.	
<b>DTIS 225</b>	<b>Oral Microbiology and Immunology</b>	<b>3 (2-3-5)</b>
	Oral microflora and ecology, dental plaque formation and its pathogenesis roles, occupation related infections, oral and systemic infections caused by oral microflora, immunity and defense mechanisms against oral infections, infection control in dentistry, molecular biological techniques in oral microbiology and immunology.	
<b>DTIS 228</b>	<b>General Pathology</b>	<b>1 (0-2-1)</b>
	Introduction to the pathology of cells and tissues. These include cell injury and cell death, disorders of cell growth, neoplasia, inflammation, wound healing, disease of immunity, general pathology of infectious diseases and mucosal infections and genetic diseases.	
<b>DTIS 229</b>	<b>Physiology I</b>	<b>1 (1-0-2)</b>
	Function of cell, cell membrane, neurons, nerve, muscular systems, nervous system and autonomic nervous system.	









- DTIS 302      Cariology II      1 (1-0-2)**  
 Diagnosis of dental caries and caries prevention including the use of fluoride and other chemical agents, sealant, oral hygiene care and diet counseling.
- DTIS 303      Dental Biomaterial Science      2 (2-0-4)**  
 Standardization, physical, mechanical and biological properties of dental materials. basic concept of polymeric materials, wax, gypsum acrylic resin and all basic restorative materials such as alloys, amalgam, composite resin, glass ionomer, pit and fissure sealant, cements, interocclusal record materials and root canal filling materials.
- DTIS 304      Dental Biomaterial Science Laboratory      1 (0-3-1)**  
 Laboratory practice of property testing of the dental materials such as dental adhesive materials, impression materials, gypsum, dental alloys, wax, acrylic resin, cements and biocompatibility test.
- DTIS 305      Fundamental of Periodontology      1 (1-0-2)**  
 Clinical characteristics, histology and remodeling of the periodontium, role of dental plaque, contributing factors, modifiers and host immune response in periodontal diseases, pathogenesis of periodontal diseases.
- DTIS 306      Fundamental of Oral Surgery      2 (2-0-4)**  
 Principle of oral and maxillofacial surgery, physical examination and history taking for dental treatment, fundamental of sterilization and decontamination, wound and extraction wound healing, principle of simple tooth extraction in the content of evaluation and diagnosis for tooth necessitated for extraction, indication and contraindication; armamentarium of tooth extraction, techniques in simple tooth extraction, pre-operative, intra-operative and post-operative care and complication prevention and correction, basic principle of flap operation for minor oral surgery including the knowledge for suture and suturing materials, principle of case selection, diagnosis, pre-operative and post-operative patients preparation; indication, techniques, prevention and correction of intraoperative and post-operative complications, methods for complicated tooth extraction, surgical tooth removal, surgical removal of impaction tooth and autogenous tooth transplantation.
- DTIS 307      Oral and Maxillofacial Radiology I      1 (1-0-2)**  
 Introduction to radiology, x-radiation, and dental x-ray machine, dental x-ray films, darkroom and film processing, digital dental radiography, factors which control radiographic quality, intraoral radiography, common errors of intraoral radiography, normal anatomical landmarks and variations in

intraoral radiographs, mounting radiographs, infection control, quality assurance, and quality control in dental radiography, Lab intraoral radiography, small group discussion about intraoral radiography.

**DTIS 308                      Oral Pathology I : Soft Tissue Pathology                      1 (1-0-2)**

Soft tissue lesions in and around the mouth. These include mucocutaneous disorders, epithelial tumors, oral potentially malignant disorders, cancers, melanoma and other pigmented lesions, soft tissue tumor and tumor-like lesions of mesenchymal and neural crest cell origin, granulomatous lesions and salivary gland diseases. The topics include definition, etiology, pathogenesis, brief clinical features, histopathological features, and final diagnosis.

**DTIS 309                      Oral Pathology II : Hard Tissue Pathology                      1 (1-0-2)**

Lesions occurring in the jaw bone. These include developmental disorders of the teeth and related tissues; diseases of pulp and periapical tissue; inflammatory jaw diseases, cysts of jaws; odontogenic tumors, lesions of non- dental origin of jaws, fibro-osseous lesions, disorders of the temporomandibular joint. The topics include definition, etiology, pathogenesis, brief clinical and radiographic features, histopathologic features and final diagnosis.

**DTIS 310                      Oral Pathology Laboratory                      1 (0-3-1)**

Laboratory practice of describing the histopathological features and making a final diagnosis of soft tissue lesions in and around the mouth and lesions of jaw bone.

**DTIS 311                      Operative Dentistry                      1 (1-0-2)**

Scope of operative dentistry; instrumentation in operative dentistry, diagnosis of dental caries, management of initial caries and cavitated carious lesion, selection of appropriate restorative materials, simple restoration with amalgam and tooth-colored materials.

**DTIS 312                      Operative Dentistry Laboratory I                      1 (0-3-1)**

The laboratory practice in simple restorations with amalgam, manipulation of liners /bases and temporary restorations, and practice in preparing tooth with aerotor bur.

**DTIS 313                      Operative Dentistry Laboratory II                      1 (0-3-1)**

The laboratory practice in simple restorations with tooth-colored materials and provide students with the knowledge and skills necessary for entry into the clinical phase of operative dentistry.





<b>DTIS 335</b>	<b>Fixed Prosthodontic Laboratory I</b>	<b>2 (0-6-2)</b>
	Preparation of plastic teeth for various types of crown restorations. Fabrication of complete cast crown for clasping. Practice the laboratory procedures of provision crown fabrication on model.	
<b>DTIS 336</b>	<b>Removable Prosthodontics II: Partial Dentures</b>	<b>2 (2-0-4)</b>
	Basic knowledge of removable partial denture, relevant definition, component parts and features, types and characteristic of clasps, design and fabrication of metal and acrylic resin base removable partial denture. The procedure starts from oral diagnosis to delivery, adjustment, post-delivery instructions to the patient, recall, repair and reline.	
<b>DTIS 337</b>	<b>Removable Prosthodontics Laboratory II : Partial Dentures</b>	<b>1 (0-3-1)</b>
	To practice how to survey and design on study casts, rest seat preparation on plastic teeth, waxing the RPD framework, setting the teeth and waxing of removable partial denture.	
<b>DTIS 401</b>	<b>Communication and Information Management for Healthcare</b>	<b>1 (1-0-2)</b>
	Information gathering, processing, communication, and management.	
<b>DTIS 402</b>	<b>Dental Public Health Administration</b>	<b>1 (1-0-2)</b>
	Health economics, health care financing system, universal health coverage and social security scheme, budgeting and budget administration, unit cost analysis. Problems in dental public health, dental health care planning and evaluation.	
<b>DTIS 403</b>	<b>Endodontics I</b>	<b>1 (1-0-2)</b>
	Endodontic theory, essential biological basis in endodontics, rational and scope of endodontic treatment. clinical diagnosis of pulp and periapical tissue, root canal system as related to endodontic treatment, rubber dam application, access opening, root canal preparation, irrigation, antibacterial medication, temporary restoration, and root canal fillings.	



<b>DTIS 410</b>	<b>Fundamental of Orthodontics</b>	<b>1 (1-0-2)</b>
	Normal occlusion and malocclusion, aetiology and contributing factors of malocclusion, oral habits, mechanism and biology of tooth movement, serial extraction and anchorages in orthodontic.	
<b>DTIS 411</b>	<b>Diagnosis and Treatment Planning in Orthodontics</b>	<b>1 (1-0-2)</b>
	Examination, orthodontic record, cephalometric landmarks, cephalometric analysis, analysis of model, orthodontic consideration in extraction and non extraction case and treatment plan in orthodontic treatment.	
<b>DTIS 413</b>	<b>Child Development Behavior Management</b>	<b>1 (1-0-2)</b>
	Child development related to chronological ages, physical, intellectual, social, emotional, and personality developments, development of primary, mixed and permanent dentitions, psychological, physical and pharmacological behavior management in healthy children and special patients.	
<b>DTIS 415</b>	<b>Fixed Prosthodontic Laboratory II</b>	<b>2 (0-6-2)</b>
	Preparation of plastic teeth for various type of bridge restorations, waxing substructure of porcelain fused to metal bridge, tooth and root canal preparation of endodontically treated tooth, fabrication of wax pattern for cast post and core on medel with indirect technique, shade selection practices, case based discussion and data integration to achieve diagnosis and treatment plan for fixed dental prosthesis, diagnosis and treatment plan for a failure case.	
<b>DTIS 414</b>	<b>Fixed Prosthodontics II</b>	<b>1 (1-0-2)</b>
	Treatment planning and treatment for fixed dental prosthesis cases, bridge abutment teeth preparation, tissue management and impression, interocclusal record, shade selection, die and working cast fabrication, restoration try in, cementation and recall, restoration of extensively damaged teeth and endodontically treated teeth. Diagnosis and treatment of failure in fixed dental prostheses.	
<b>DTIS 416</b>	<b>Dental Management in Medically Compromised Patients</b>	<b>1 (1-0-2)</b>
	The principle of dental treatment planning for medically compromised patients, relationship between systemic diseases and treatment preparation for oral surgery, evaluation and preparation of medically compromised patients prior dental treatments, medical consultations and prevention of complications and emergencies in dental clinic.	







jaws, radiographic appearances of neoplasms and tumor like lesions, diagnostic images of salivary gland diseases, and small group discussion about oral lesions

**DTIS 434 Evidence-based Dentistry 1 (1-0-2)**

Definition of evidence-based practice, critical thinking and searching of information related to medical controversy, level of evidence and critical appraisal of scientific literature to support the practice.

**DTIS 435 Occlusal Analysis and Occlusal Splint Waxing Laboratory 1 (0-2-1)**

Clinical practice in assessment, differential diagnosis and management of temporomandibular disorders (TMD), occlusal analysis and practice construction of stabilization splint.

**DTIS 436 Temporomandibular Disorders 1 (1-0-2)**

Definition, epidemiology, etiology, sign and symptoms, assessment including TMJ imaging, differential diagnosis, reversible and irreversible management of temporomandibular disorders (TMD), especially use of intra-oral appliance in management of TMD.

**DTIS 501 Comprehensive Dental Care Orientation 1 (1-0-2)**

Introduction to comprehensive care setting, orientation to comprehensive clinic policy and procedure guidelines, dress code and conduct, infection control protocol, patient assignment and case management, orientation to specialty clinics and their policies, competency checklist and grading system.

**DTIS 502 Hospital Dentistry 1 (1-0-2)**

The system of dental treatments in hospital circumstances including admission of in-patient, medical forms and fill-in form techniques, consultation and referral of patients, pre and post-operative care, laboratory order and interpretations advanced cardiac life supports, comprehensive evaluation in the whole topics in which the students had completed in previous years also took place in the credits to summarize the knowledge of oral and maxillofacial surgery and prepared for practicing after graduated.

**DTIS 503 Oral and Maxillofacial Trauma 1 (1-0-2)**

Oral and maxillofacial injuries: causes, mechanism of fracture, diagnosis and treatment, mass casualties and primary care in these injured patients, injury of body parts including chest, abdominal, orthopaedics injuries.

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| <b>DTIS 504</b> | <b>Advance Oral and Maxillofacial Surgery</b>   | <b>1 (1-0-2)</b> |
|                 | Practice in oral surgery in clinic, complicated extraction, surgical removal of simple impacted teeth, postoperative instruction, postoperative care and follow-up such as wound cleansing, stitch removal, management of minor complications, practice in IM and IV technique, observation in major oral and maxillofacial surgery under general anesthesia, ward round and report.  |                  |
| <b>DTIS 505</b> | <b>Pain and Anxiety Control in Dental Practice</b>  | <b>1 (1-0-2)</b> |
|                 | Principle of pain control, pharmacological and non-pharmacological pain management, use of anticonvulsant and medications for musculoskeletal disorders in orofacial pain management, general anesthesia and sedation in dentistry, methods, preoperative evaluation and preparation, postoperative care and complications.   |                  |
| <b>DTIS 506</b> | <b>Clinicopathological Seminar</b>  | <b>1 (1-0-2)</b> |
|                 | Clinicopathological conference of dental patients with lesion in oral cavity, facial bone and jaw bone emphasizing on the investigation of patient's clinical manifestation, pathological finding, and histopathology, discussion on etiology, pathogenesis, treatment planning and prognosis. seminar on related current topic.  |                  |
| <b>DTIS 508</b> | <b>Periodontal Therapy 2</b>  | <b>1 (1-0-2)</b> |
|                 | Didactic course of surgical periodontal treatment including correction of periodontal defects, for example, gingivectomy and gingivoplasty, ostectomy and osteoplasty, root amputation, bone graft, guided tissue regeneration, electrosurgery and laser. Suturing and dressings, healing of periodontal wound, supportive periodontal therapy and interdisciplinary treatment planning.  |                  |
| <b>DTIS 521</b> | <b>Advanced Operative Dentistry</b>   | <b>1 (1-0-2)</b> |
|                 | Study of technology and advance in operative dentistry and restorative dentistry, complex tooth restoration with various restorative materials, tooth bleaching, operative treatment plan, morcove, including self-study from operative dentistry problems for sustainable knowledge of learners.   |                  |
| <b>DTIS 541</b> | <b>Comprehensive Dental Care Clinic II</b>  | <b>3 (0-9-3)</b> |
|                 | Observation and practice of oral diagnosis, sequential treatment planning, restorative and prosthetic dentistry, periodontics, endodontics, oral surgery, oral medicine radiology, preventive dentistry, and recall maintenance; develop more complex prosthetic treatment plans; prioritize dental treatments in various disciplines; do referrals; start the beginning level of clinical competency exams, collect patient clinical data for pre-treatment case presentation. |                  |



<b>DTIS 548</b>	<b>Orthodontics Clinic</b>	<b>1 (0-3-1)</b>
	Clinical practice of simple orthodontic treatment in mixed dentition patients or patients qualified for using removable orthodontic appliances, practicing orthodontic diagnosis, treatment planning, and removable appliances design in real patients and former patients' data; orthodontic chair-side assistance especially fixed orthodontic appliance and promote orthodontic knowledge to patients, patients' parents and general public.	
<b>DTIS 549</b>	<b>Oral and Maxillofacial Radiology Clinic</b>	<b>2 (0-6-2)</b>
	Practice in model and patients in the aspects of intraoral radiography and its interpretation, extraoral radiography and its interpretation, dental radiography in children and its interpretation, digital dental radiography, Infection control in dental radiography and radiation protection in dental radiography.	
<b>DTIS 550</b>	<b>Community Oral Health Program</b>	<b>1 (0-3-1)</b>
	Practice conducting a school preventive program that includes 3 aspects, preventive services, education, and school environments.	
<b>DTIS 601</b>	<b>Jurisprudence and Forensic Odontology</b>	<b>1 (1-0-2)</b>
	Philosophy of laws and jurisprudences, introduction to Thai legal system, licensure and the practice of dentistry, patient's bill of rights, laws and acts pertaining to the dental profession, justice system, basic forensic medicine, and forensic dentistry.	
<b>DTIS 602</b>	<b>Dental Office Administration</b>	<b>1 (1-0-2)</b>
	Safety and effective dental office management, co-worker personnel and patients management, dental clinic design and selection of dental equipments, working with dental assistants by four-handed dentistry.	
<b>DTIS 603</b>	<b>Geriatric Dentistry</b>	<b>1 (1-0-2)</b>
	Theory of aging, physiological and mental status changes, common diseases in the elderly, pharmacological assessment, comprehensive treatment plan, prevention of oral disease and appropriate considerations for dental treatment.	
<b>DTIS 604</b>	<b>Applied Clinical Pharmacology in Dentistry</b>	<b>1 (1-0-2)</b>
	An update of drugs necessary in clinical dentistry including antimicrobial drugs, analgesic and anti-inflammatory drugs, sedatives and hypnotics, local anesthetics, desensitizing agents, antihistamines,	

hemostatic agents; immunopharmacology; drugs affect on oral cavity; drugs used in emergencies; drugs used in elderly, pediatric, pregnancy and breast-feeding women.

**DTIS 641**            **Comprehensive Dental Care Clinic VI**            **3 (0-9-3)**  
Practice of oral diagnosis, sequential treatment planning, restorative and prosthetic dentistry, periodontics, endodontics, oral surgery, oral medicine, radiology, preventive dentistry, and recall maintenance with more technical competence and theoretical knowledge; better understanding in comprehensive case management; clinical competency exams.

**DTIS 642**            **Comprehensive Dental Care Clinic VII**            **3 (0-9-3)**  
Clinical maturity in overall patient management, advancement in technical competence, integration of theoretical knowledge into their practice; clinical competency exams; collection of patient clinical data for post-treatment case presentation.

**DTIS 643**            **Comprehensive Dental Care Clinic VIII**            **2 (0-6-2)**  
Finishing up assigned patients; practice management prior to graduation.

**DTIS 644**            **Comprehensive Dental Care Clinic IX**            **3 (0-9-3)**  
Conclude comprehensive dental practice, completion of a case which operative, periodontic and prosthodontic work are involved, completion of 2 or more other comprehensive cases which operative, periodontic and prosthodontic work may not be all involved.

**DTIS 645**            **Comprehensive Dental Care Seminar II**            **1 (1-0-2)**  
Presentation of a post-treatment comprehensive case that operative, periodontic and prosthodontic work were all involved.

**DTIS 646**            **Oral and Maxillofacial Surgery Clinic II**            **3 (0-9-3)**  
Clinical practice of oral surgery, minor oral surgery assistance, surgical removal of simple impacted teeth, postoperative instruction, postoperative care and follow-up such as wound cleansing, sutures removal, management of minor complications, cardiopulmonary resuscitation practice in model.

**DTIS 647**            **Primary and Emergency Treatment Clinic**            **1 (0-3-1)**  
Clinical practice for primary and emergency treatment to relieve dental emergency problems, apply all relevant theoretical knowledge in providing dental care services including identification

of the patient's chief complaint, examination, diagnosis, planning, proper emergency treatment, and post operative care to prevent diseases progression and recurrence.

**DTIS 648 Pediatric Dentistry Clinic II 2 (0-6-2)**

Comprehensive pediatric dental practice including patient evaluation, examination, diagnosis, treatment planning, comprehensive dental cares as well as oral disease prevention appropriate for the disease and risk of individual patient.

**DTIS 649 Hospital Rotation 1 (0-3-1)**

Observation of hospital dentistry in hospital setting such as general, regional and university hospital, learning system of hospital dentistry, dental department working system, departments in hospital, inter-department working, communication between departments, working with other personels in the hospital, dental management in medical compromised patients and in-patient cares.

**DTIS 650 Seminar in Dental Management in Medically Compromised Patients 1 (1-0-2)**

Case conference and case presentation of dental patients with systemic diseases emphasizing on patient evaluation, physical and dental examination, medical and dental chart recording, physical and dental supplementary investigation, diagnosis and treatment planning, seminar on pathophysiology of systemic diseases, etiologies, signs, examination, diagnosis, treatment planning and patient referral as well as patient management in emergency and normal condition.

**DTIS 651 Case-based Clinical Seminar 2 (2-0-4)**

Seminar about application of clinical science for diagnosis, treatment and prevention of diseases related to dentistry.

**Professional electives 6 Credits**

**DTIS 661 Tooth Bleaching 1 (1-0-2)**

Materials, instruments and devices involving tooth bleaching; clinical procedures, patient communication, treatment plan and discussion; dental treatment recording before-during-after tooth bleaching; follow up and maintenance and prevention; remedy for treatment complication

**DTIS 701 Dental Implantology Clinic 1 (0-2-1)**

Treatment of uncomplicated dental implant consisting of examination and diagnosis, construction of treatment planning, providing or assisting dental implant treatments in patients.

<b>DTIS 702</b>	<b>Study Visit in Thai Health Delivery System</b>	<b>2 (0-2*-10)</b>
	Study visit of the provincial health delivery system, practice in hospitals and various level of health services.	
<b>DTIS 703</b>	<b>Research Presentation</b>	<b>1 (1-0-2)</b>
	Forms of research dissemination, methods for research presentation practice presentation, analysis and discussion of research paper also included.	
<b>DTIS 704</b>	<b>Applied Molecular Biology of Cell</b>	<b>1 (1-0-2)</b>
	Basic functional principle of cell, gene expression and regulation, mutation and DNA repair, cell survival and apoptosis, signal transduction, and application of bioinformatics to medical research.	
<b>DTIS 705</b>	<b>Orthodontics Clinic Experience</b>	<b>1 (0-3-1)</b>
	Clinical practice/observation of orthodontic treatment in mixed dentition patients or patients qualified for using removable orthodontic appliances, practicing orthodontic diagnosis, treatment planning, and removable appliances design, miscellaneous orthodontic chair side assistance and media fabrication to promote orthodontic, knowledge to patients, patients' parents and general public by various means of information technology.	
<b>DTIS 706</b>	<b>Seminar in Pediatric Dental Patients</b>	<b>1 (1-0-2)</b>
	Case presentation and discussion on comprehensive treatment planning, safe and effective techniques and prevention of oral diseases in pediatric dental cases with advanced restorative and dental rehabilitation needs, dentofacial traumatic injuries, infant oral care problems, medical problems, handicapped, syndromes and behavioral problems basing on current concepts in pediatric dentistry.	
<b>DTIS 707</b>	<b>Pharmacological Pediatric Behavior Management</b>	<b>1 (1-0-2)</b>
	Principle of oral sedation and general anesthesia in pediatric patients, indication, advantage and disadvantage, dental consideration, preparation of patients for dental procedure and care of patient following oral sedation and general anesthesia, experiences in observing dental procedures under oral sedation and general anesthesia.	
<b>DTIS 708</b>	<b>Interdisciplinary Patient Care in General Dentistry</b>	<b>1 (1-0-2)</b>



Seminar on comprehensive dental clinical practice, emphasize on clinical skills to achieve comprehensive interdisciplinary approach, treatment planning for a patient who needs complicated interdisciplinary approach, importance of each treatment approach and treatment sequencing especially discipline controversy cases.

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| <b>DTIS 709</b> | <b>Complex Restorations and Esthetics in Operative Dentistry</b>   | <b>1 (0-3-1)</b>  |
|                 | Complex resin composite restorations, laboratory practice of gold and resin composite inlays/onlay and vital tooth bleaching.  |                   |
| <b>DTIS 710</b> | <b>Advanced Endodontic Experience</b>  | <b>1 (0-3-1)</b>  |
|                 | Practice of root canal treatment with complex instruments and techniques such as rotary instruments, treatment of curved canals, warm vertical compaction technique, retreatment and management of endodontic complication.  |                   |
| <b>DTIS 711</b> | <b>Dental Clinical Experience I</b>  | <b>2 (0-6-2)</b>  |
|                 | Clinical observation in dental clinics, with emphasis on operative dentistry, periodontics, oral Surgery and prosthodontics in dental institutes.  |                   |
| <b>DTIS 712</b> | <b>Dental Clinical Experience II</b>   | <b>4 (0-12-4)</b> |
|                 | Clinical observation in dental clinics, with emphasis on operative dentistry, periodontics, oral Surgery and prosthodontics in foreign dental institutes.  |                   |
| <b>DTIS 713</b> | <b>TMD and Orofacial Pain Clinic Experience</b>  | <b>1 (0-3-1)</b>  |
|                 | Clinical practice in multidisciplinary management of temporomandibular disorders and orofacial pain.   |                   |
| <b>DTIS 714</b> | <b>Differential Diagnosis of Oral and Maxillofacial Lesions</b>  | <b>1 (1-0-2)</b>  |
|                 | Radiographic interpretation for general practitioner, radiographic differential diagnosis for children, caries, and periapical lesions; radiographic differential diagnosis for oral and maxillofacial lesion I (cyst & benign tumor), radiographic differential diagnosis for oral and maxillofacial lesion II (malignant tumor, fibro-osseous lesion & tumor-like lesion), cone beam computed tomography and its application in oral and maxillofacial region. |                   |

- DTIS 715 Surgical Crown Lengthening 1 (1-0-2)**  
 Etiologic factors of short clinical crown, either correlated with or without biologic width, clinical evaluation for determining the correction modalities, treatment planning, interdisciplinary consultation, emphasizes surgical crown lengthening technique, rationale, instrumentation, post operative care and healing, complications and management. Including clinical practice in case analysis, surgical assisting and follow up.
- DTIS 716 Advanced Minor Surgery Clinic 1 (0-3-1)**  
 Practicing the minor oral surgery including complex exodontias, impaction removal in complicated classification, embedded tooth removal, preprosthetic surgery. The course also held seminar in the related titles or the contemporary topics as applicable in forthcoming graduation.
- DTIS 717 Research in Dental Pulp Physiology 1 (0-3-1)**  
 Research in physiology of dental pulp and dentine e.g. pulpal blood circulation, fluid flow in dentine, clinical knowledge related to dental pain.
- DTIS 718 Dental Public Health Administration for AEC 1 (1-0-2)**  
 Public health system in AEC countries including health economics, health care financing system, universal health coverage and social security scheme, budgeting and budget administration, unit cost analysis
- DTIS 719 Dentist and Society 4 (0-12-4)**  
 Dentistry's roles and functions : dentistry education, Information searching in dentistry, personality development, Thai society structure, culture and tradition, health and health system, Thai traditional medicine and Thai folk wisdom, principle of holistic care and community experience.
- DTIS 720 Social Skills for Dentists 1 (0-2-1)**  
 Additional social skills beneficial for dental profession
- DTIS 721 Intermediate Research Experience 2 (0-6-2)**  
 Conducting research or joining a research team in any field of medicine or related disciplines in other institutions, either within the country or in a foreign country.

- DTIS 722      Advanced Research Experience      2 (0-6-2)**  
Conducting research or joining a research team in any field of medicine or related disciplines in other institutions, either within the country or in a foreign country.
- DTIS 723      Thai Language for Dentist      2 (2-0-4)**  
Basic Thai grammar and structures for overseas students stressing the most necessary communicative skills of listening and speaking to enable the students to firstly cope with variety of daily situation and secondly but equally stressed, with patients in clinical practices
- DTIS 724      Digital Technology in Operative Dentistry      1 (1-0-2)**  
Learning about material, device and digital technology in dentistry utilized in all areas of dentistry consisting of oral impression, treatment planning, milling and 3-D printing which is a foundation of country development to digital technology era
- DTIS 725      Seminar in Early Orthodontic Treatment      1 (1-0-2)**  
Seminar of diagnosis, treatment plan, preventive and interceptive orthodontic in deciduous and mixed dentition to correct malocclusion and dentofacial deformities