

ATSU

UNIVERSITY CATALOG



Quarterly Addendum No. 3
Effective April 3, 2017

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16-17 ATSU University Catalog – Quarterly Addendum No. 3

Effective Date

The following additions, corrections, or edits are addendums to the 16-17 ATSU University Catalog and should be referenced in conjunction with the Catalog. The effective date of the catalog is July 1, 2016, and the effective date of this quarterly addendum is April 3, 2017 unless noted.

Corrections

ATSU-ASHS's Master of Science in Athletic Training degree program curriculum is comprised of 50 credits instead of the previously reported 48 credit hours. This correction is regarding the program length section. The typical course schedule and course descriptions and credit values sections are accurate. Effective July 1, 2016.

The credit values for the courses that comprise ATSU-ASDOH's Certificate in Orthodontics & Dentofacial Orthopaedics program have been revised to reflect the correct values. Please see Appendix B for a revised list of the curriculum with corrected credit values. The total program length of 97.5 credit hours is still accurate.

Kirksville College of Osteopathic Medicine (KCOM)

Doctor of Osteopathic Medicine Program

Course Descriptions and Credit Values

Electives

The electives have been updated to include the course director or course manager. The person listed at the end of each elective is the contact for students to use when they would like more information on the elective. Effective July 1, 2016.

Elective	Course Director or Course Manager
Advanced Disaster Life Support (ADLS) - ELEC6221	Kent Campbell, DO
Advancing Skills in Osteopathy for Students - ELEC6224	Brian Degenhardt, DO
Advanced Wilderness Life Support (AWLS) - ELEC6226	James Adams, DO
Basic Disaster Life Support (BDLS) - ELEC6220	Kent Campbell, DO
Clinical Pharmacology - ELEC8431 - 5.5 credit hours:	Robert Theobald, PhD
Cranial Osteopathy - ELEC6223	Richelle Lee
Culinary Medicine - ELEC6225	Patricia Sexton, DHEd
Cultural Awareness in Medicine - ELEC6217	Patricia Sexton, DHEd
End-of-Life Issues and Hospice Care - ELEC5115	Patricia Sexton, DHEd
Health Partners Interprofessional Program - ELEC5000	Janet Head, EdD
Individual Cognitive Stimulation Therapy (iCST) - ELEC6227	Janet Head, EdD
Interprofessional Cross-Campus Collaborative Case - ELEC5010	Janet Head, EdD

Introduction to Public Health - ELEC6222	Patricia Sexton, DHEd
Medical Letters - ELEC5118	Patricia Sexton, DHEd
Medical Spanish 1 - ELEC6211	Janet Head, EdD
Pranic Healing - ELEC6215	Ralph Boling, DO
Research (for OMS-1) - ELEC5117	William Sexton, PhD
Research (for OMS-4) - ELEC8417	William Sexton, PhD
Spirituality in Medicine - ELEC5116	Patricia Sexton, DHEd
Vulnerable Populations - ELEC5119	Patricia Sexton, DHEd

Arizona School of Health Sciences (ASHS)

[Transitional] Doctor of Audiology - online

Length of Program

The length of program has been edited to include an explanation of the advanced credits that are awarded to newly accepted students in the online Doctor of Audiology program. Effective July 1, 2016

The average length of completion for the transitional Doctor of Audiology degree program is 2 - 3 years, with a requirement of at least 67 credits. The number of courses needed to achieve the minimum 67 credits varies as each degree plan is customized to the student's needs.

Newly accepted transitional Doctor of Audiology students are awarded 36 credits for clinical practice. Credit for clinical practice represents credit for documented clinical competence through certification and/or licensure in audiology and a minimum of 4 years of clinical practice prior to matriculation. Additional advanced credits for established competencies are awarded based on the admissions requirements for audiologists to enter the transitional audiology program and based on a review of the Evaluation of Practicing Audiologists Capabilities Assessment (E.P.A.C.) completed by the student. Provision of credit for established competencies in the ten broad categories of audiologic care enables an appropriate individualized academic plan to be determined for each audiologist. These competencies and credit for clinical practice are listed on the transcript and count as credit towards the degree. Listed below are the competencies as they are listed on the ATSU transcript.

Advanced Credit Competency Courses

- AdvCredit - Auditory and Vestibular Systems - AUD900 - 1-2 credit hours
- AdvCredit - Diseases, Dysfunction and Other Abnormalities - AUD901 - 1-2 credit hours
- AdvCredit - Examination Procedures - AUD902 - 1-2 credit hours
- AdvCredit - Audiological Rehabilitation - AUD903 - 1-2 credit hours
- AdvCredit - Audiological Counseling and Interpersonal Skills - AUD904 - 1-2 credit hours
- AdvCredit - Professional, Business, Personnel and Leadership Skills - AUD905 - 1-2 credit hours
- AdvCredit - Legal, Ethical, Legislative and Forensic Issues - AUD906 - 1-2 credit hours
- AdvCredit - Prevention of Hearing Loss - AUD907 - 1-2 credit hours
- AdvCredit - Audiological Instrumentation and Electronics - AUD908- 1-2 credit hours
- AdvCredit - Audiological and Speech Sciences - AUD909 - 1-2 credit hours
- AdvCredit - Credit for Clinical Practice - AUD910 - 36 credit hours

Doctor of Occupational Therapy – residential

Course Descriptions and Credit Values

The remainder of the residential Doctor of Occupational Therapy program course descriptions and credit values has been added to document the total required 111 credit hours. The full list may be found in Appendix A. Effective July 1, 2016

Appendix A

Doctor of Occupational Therapy - residential

Course Descriptions and Credit Values

Advocacy, Policy & Current Trends – 7330 – 3 credit hours: This course poses three areas of skill development that provide the foundation for quality leadership in any organization. Our specific concerns will encompass the investigation of public policy and current trends that influence health care practices. In addition, the student will be introduced to the role of advocate and the many ways advocacy may be mobilized to serve individuals, communities and populations. The nature of power will be examined as it contributes to policy development and organizational management.

Analysis of Human Movement – OTDE6140 – 3 credit hours: This course covers the principles of kinesiology and biomechanics as they relate to human motion. An understanding of human motion is necessary for physical evaluation and occupational analysis in occupational therapy. The functional application of human motion is covered, including evaluation techniques of goniometry and manual muscle testing.

Directed Research I – 7710 – 2 credit hours: This course examines the process for conducting research. Students will participate in faculty-led research projects. This course will focus on investigation of the literature in the area of research interest.

Directed Research II – 7720 – 2 credit hours: This course continues to examine the process for conducting research. This course will focus on delineation of the research purpose, question, hypothesis, background, relevance, method and design.

Directed Research III – 8710 – 2 credit hours: This course continues to examine the process for conducting research. This course will focus on earning IRB approval or completion of the research proposal and initiating data collection.

Directed Research IV – 8720 – 2 credit hours: This course examines the process for conducting research. Students will participate in faculty-led research projects. This course will focus on data analysis and interpretation.

Directed Research V – 8730 – 2 credit hours: This course examines the process for conducting and disseminating research. Students will participate in faculty-led research projects. This course will focus on the preparation of and dissemination of research project results.

Doctoral Experience – 8810 and 8820 – 4 credit hours each: Students will be actively engaged in the implementation of the project they have developed in collaboration with their community site. Students will work closely with staff and stakeholders at each site and will have ongoing support, as needed, from their faculty advisor.

Elective – 8910 – 3 credit hours: Students will enroll in an elective course from outside of the entry-level doctor of occupational therapy (OTD-E) program that will contribute to their knowledge, skills and understanding of theories, practice and/or programming to further support their Doctoral Experience and their role as an occupational therapy practitioner.

Emerging Practice Environments – 7420 – 2 credit hours: This course content offers the student a window into present and perhaps future occupational therapy and occupation-centered practices. Sometimes referred to as non-traditional practice settings will be explored as well as the skills and knowledge that may be required to offer best-practice in widely varied settings with divergent agendas for care. Exposure to innovative practices and practice approaches may include, but not be limited to: Telehealth technologies, Ergonomics and Universal Design; occupational therapy in Acute Care settings; and Primary Health Care environments. Populations with non-traditional needs will also be considered and may include the full life-span. Particular techniques for the delivery of therapy via both traditional and nontraditional routes may include lifestyle coaching and other modes appropriate to the communication technology of the times.

Foundations I: History & Philosophy of Occupational Therapy – OTDE6210– 2 credit hours: This course examines the development of occupational therapy as a profession. Occupational therapy will be investigated from the perspective of its historical and cultural context, including philosophy and social movements, political and economic influences, and the rise of American medicine. The course will illustrate how the areas and methods of occupational therapy training/education and practice have changed over time.

Foundations II: Occupation-based Activity Analysis & Synthesis – OTDE6220 – 2 credit hours: This course provides an introduction to and application of occupational analysis to tasks and will assist the student in accessing their imagination and creativity through opportunities to engage in art, craft, play and activity. The history of the OT profession will continue to be discussed to include early interest of occupational therapists in the healing power of craft; an interest that is being resurrected by contemporary craftsmen to a popular place in present day American society. Concepts of grading and adapting occupations will be explored and opportunity will be given to apply principles of the teaching and learning process. Students will use their exposure to the ‘doing’ of activities to not only engage their creativity but to develop proficiency in the analysis of activity performance, a core occupational therapy skill that can then generalize to the analysis of activity and occupation on a much broader level.

Fundamentals of Assessment – 6250 – 2 credit hours: This course provides an introduction to the evaluation process used in occupational therapy for clients across the lifespan. Sources of data and various evaluation tools are explored. The principles of measurement, including test selection, administration, scoring, and interpretation are covered.

Fundamentals of Service Provision Across the Continua of Care – OTDE6310 – 3 credit hours: This course provides a broad overview of the various contexts of occupational therapy service provision that comprise the continua of care across the lifespan. Occupational therapists’ roles within these systems are explored and discussed, including in medical, educational and community-based settings. An introduction to professional responsibilities including documentation is also provided.

FW Level I: Children & Youth or Physical Disabilities – 6620 and 7610 – 1 credit hour each: This level I fieldwork is the second experience in The Occupational Therapy Student in Practice content block.

FW Level II: Behavioral Health/Psychosocial or Children & Youth or Physical Disabilities – 7620 and 8601– 6 credit hours each: This level II fieldwork is the fourth experience in The Occupational Therapy Student in Practice content block.

Groups: Theory and Process – OTDE6510 – 2 credit hours: This course will assist students in developing an understanding of group process and the relationship of self to the group. Group dynamics as well as the phases of group development, leadership roles, conflict resolution, problem solving, and clinical application are emphasized. Students are required to develop group protocols, lead groups, and process the outcomes. Students will apply a variety of approaches from various frames of reference.

Human Anatomy I – HS510 – 4 credit hours: This course is a study of the general principles of histology and human anatomy with emphasis on the development of the musculoskeletal system of the head and neck and upper extremity. Prosected human cadaver laboratory is required.

Maintaining Health for Clients with Chronic Conditions – 7230 – 2 credit hours: This course will focus on those who are living in the community with chronic illness and disease. This group ranges across all ages but many of these individuals are considered to also be part of the older adult population with special concerns and interests. For all of these individuals we will focus on the relationship of occupation to health, well-being, and participation. The student will explore lifestyle factors that influence engagement in occupation in an effort to identify strategies to promote wellness and healthy living. Lifestyle Design and components of The Model of Human Occupation will be offered as potentially organizing theoretical frames to best meet the needs of this population.

Modalities – 7410 – 2 credit hours: This course provides instruction related to the use of various therapeutic interventions used to prepare the client to engage in occupations. Course content will include the instruction, application and assessment of a variety of splinting techniques, taping techniques, as well as the use of physical agent modalities. Indications and contra indications will be discussed for each technique or modality presented. Within the

context of the course, discussions about proper clinical language, professionalism and documentation will be addressed.

NBCOT Prep Course – 8920 – 1 credit hour: Students will attend a two-day course that will provide information, learning activities, practice questions and study strategies to use in preparation for taking the National Board for Certification in Occupational Therapy.

Neuroscience: Basis for Human Behavior – OTDE6130 – 3 credit hours: This course will present the development, structure, and function of the central and peripheral nervous systems, including the autonomic nervous system, ventricular system and meninges. Blood supply, sensory and motor systems, reflex pathways, and sequelae of lesions of the nervous system will be presented. Beginning assessment of neurological conditions will be demonstrated. This course includes clinical case analysis of frequently seen neurological conditions in occupational therapy practice.

Pathophysiology & Conditions – OTDE6120 – 3 credit hours: This course is an introduction to the basic pathological processes as well as the clinical management of common diseases, conditions and disorders across the lifespan. The fundamentals of general pathology covered include the mechanism of cell injury & healing, response to infection, and disorders of the immune system. In addition, the etiology, pathogenesis, and morphologic manifestation of disease in the major organ systems are discussed with emphasis on the relationship between pathology and the signs/symptoms of disease. Diagnoses, prognoses, typical course of illness and its effects on occupational performance will be reviewed. Medical management and other treatment strategies will be discussed.

Practice Immersion: Behavioral Health & Psychosocial Approaches – OTDE6520 – 6 credit hours: The overall purpose of this course is to prepare the student to assess and provide occupation-based interventions that address the psychosocial needs of clients across the lifespan. Students will be able to design and deliver occupational therapy services based upon appropriate theoretical models and frames of reference that can be used across a variety of systems and settings, including but not limited to behavioral health/psychiatric, community and education based settings.

Practice Immersion: Children & Youth – 7210 and 7220 – 3 credit hours each: This course introduces students to the occupational development of infants, toddlers, children and adolescents within their cultures and their communities. The context of family and the child's expected environments of home and school will preface the investigation of atypical development and the conditions seen by occupational therapists; and the realm of occupational therapy assessment and remediation. Students will explore the history of occupational therapy practice in pediatrics as well as theories to offer explanation of play, work and self-care for this age group. Further, the course will explore the evaluation process and treatment models used in a variety of pediatric settings with special attention to family-centered care and collaboration.

Practice Immersion: Physical Disabilities – 7310 and 7320 – 3 credit hours each: This course will introduce the student to evaluation, assessment, and intervention for clients who have experienced interruptions in occupational engagement resulting from physical dysfunction. It will prepare the occupational therapy student for a generalist practice in adult physical rehabilitation. Students will be exposed to a variety of current practice settings (e.g. hospital, community, long-term care, populations; adults and older adults, and specific conditions). The history and theoretical foundations of occupational therapy for individuals with physical disabilities will be studied within the framework of occupation-centered and client-centered approaches to practice. The occupational therapy student will be provided with an overview of occupational therapy evaluation and intervention in relation to the conditions most often experienced by individuals in an adult physical rehabilitation setting. Students will be encouraged to make clinical decisions based on current best evidence and patient/client perspectives.

Professional Development I: Professionalism – OTDE6410 – 2 credit hours: This course will provide a foundation for exploring the roles and responsibilities associated with becoming a health professional. Main topics will include professionalism, ethics and values of the profession of occupational therapy, clinical reasoning and evidence based practice, and an introduction to the importance of lifelong learning.

Professional Development II: Prevention and Health Promotion – OTDE6420 – 2 credit hours: This course is designed to stimulate critical thinking about the relationship of occupation to health, wellbeing, and participation.

Occupational justice and social/health disparities as they influence engagement in health promoting occupations will be discussed. Concepts central to prevention of illness and disability and the promotion of health for individuals, populations, and communities will be examined. Students will examine their own state of health and wellbeing and develop a plan for care of themselves as students and as future health care practitioners.

Professional Development III: Building Community Partnerships & the Needs Assessment Process – 6530 – 1 credit hour: This course continues the thread that connects the occupational therapy practitioner to the needs of the larger community. Specifically this course will focus on occupation-based programming for new and/or extended services. Services may be designed for the traditional practice environments, or in the communities of non-profit/for-profit enterprises. Following an introduction to how communities evolve and function, students will learn about the structure of agencies and organizations that serve the needs of these communities. Assessing the needs of a community and matching these needs to the interests and expertise of the practitioner will be the primary focus.

Professional Development IV: Program Design & Development – 6540 – 2 credit hours: To complete the 'professional development' series this course will provide the opportunity to link the needs assessment process and preliminary planning completed in OT754 to the development and implementation of community based programming. Students will be introduced to marketing procedures, program evaluation and outcome measurement, financial planning, and the fundamentals of grant identification and application. Community involvement toward sustainability will be emphasized from the process of needs assessment to program outcomes.

Research Designs & Methods – OTDE6610 – 4 credit hours: This course provides an overview for scholarly activity, specifically in regards to discovery research with a focus on the development and application of graduate level knowledge and skills related to research designs methods. Skills regarding the development of a research proposal, including conducting a literature review, the identification of a problem/research question, developing a hypothesis, designing a study and submitting an Institutional Review Board application are integral components of this course. Students also develop understanding of both quantitative and qualitative designs, methods, and data analysis.

Seminar I: Introduction to Proposal Development – 7510 – 3 credit hours: In this doctoral experience preparatory course the student will prepare his or her proposal for the Doctoral Experience component of the program. Students will utilize all previous didactic and experiential components of the program; specifically the Professional Development series of courses in order to identify a potential community/population with whom they will partner in the design and development of new programming or an extension of existing programming. Students, with the support of faculty mentors, will engage in the IRB process, as needed, based on the scope and nature of the proposal.

Seminar II: Doctoral Experience Preparation – 8510 – 1 credit hour: Students in this course will work to finalize plans for their Doctoral Experience, expanding and revising any necessary components of their program as presented in their doctoral proposal. Students will prepare all materials needed for the program they have designed, working together with staff and other stakeholders from their community site to be ready for implementation of the program that provides the basis for their Doctoral Experience.

Seminar III: Culminating Seminar – 8520 – 4 credit hours: In this course students will process and present the outcomes of their work in the Doctoral Experience. Students will provide an assessment of the project they implemented, reporting on the outcomes that were achieved during the experience. Students will present formal presentations and/or posters to showcase their work and outcomes. Students will be required to prepare a formal product, which is ready for submission in a professional, peer-reviewed forum (i.e. professional journal, state or national professional symposium or conference, etc.).

The Occupational Therapist as an Effective Communicator & Educator – 6350 – 1 credit hour: This course will assist the student in becoming a competent and effective communicator. Whether in personal communication, conversations with clients/patients, communicating with professional peers, or speaking to small or large groups effective communication gets the message across while maintaining and enhancing the relationship. The occupational therapist is required to be a good communicator. In roles of supervision and leadership communication is critical whether oral, or written. Of equal importance is the role of educator to clients, families, significant others, communities, colleagues, other health care providers, and the public.

The Practice of Leadership & Management in Evolving Practice Environments – 7240 – 4 credit hours: This course will explore the similarities and differences in the roles and skills needed for leadership and management. Leadership theories and their application in occupational therapy and other arenas are explored. Principles of organization and management in the health care system today will be discussed. Models covered include nonprofit, proprietary, entrepreneurial and corporate facilities. Systems of managed care and changes in health care delivery are examined. The course will demonstrate the need for OT practitioners to possess and develop both leadership and management skills for successful practice.

Appendix B

Certificate in Orthodontics & Dentofacial Orthopaedics Program

Course Descriptions and Credit Values

Biomechanics I-II - ADE 5017-5018 - 1 credit hour and 2 credit hours respectively: In this course, residents will develop a working knowledge of the biomechanical principles used in orthodontic tooth movement and dentofacial orthopedics. The science of biomechanics and biomaterials applied to clinical situations will be stressed. Residents will learn to recognize favorable and unfavorable reactions to force systems, and begin to utilize principles learned in the design of optimal appliances and springs.

In addition, residents will learn about the composition, properties and manipulation of modern orthodontic materials including impression materials, bonding and banding cements, ceramic, plastic and metal brackets, orthodontic wires and springs, latex and non-latex elastics, and alastic ties and chains.

Biomechanics III - ADE5019 - 1 credit hour: In this course, residents will further develop their working knowledge of the biomechanical principles used in orthodontic tooth movement and dentofacial orthopedics. The application of biomechanics and biomaterials to clinical situations will be stressed. Residents will learn to recognize favorable and unfavorable reactions to force systems, and begin to utilize principles learned in the design of optimal appliances and springs.

Cell, Oral & Developmental Biology - ADE1002 - 1 credit hour: This course provides the resident with detailed information about cell development, cell structures, membrane flow, signal transduction, apoptotic process, inheritance and early embryogenesis; oral, craniofacial and skull development.

Craniofacial Growth & Development I - ADE1006 - 1 credit hour: In this course, the residents will be provided with sound scientific background of physical and craniofacial growth that will allow each resident to recognize and manage patients with both normal and abnormal growth.

Craniofacial Growth & Development II - ADE1012 - 1 credit hour: This course provides sound scientific background of physical and craniofacial growth that will allow each orthodontic resident to recognize and manage both normal and abnormal growth patients. Several specific syndromes will be presented with clinical relevance

Data Analysis - ADE1081 - 1 credit hour: This course is designed to complement the Research Methodology course and will run concurrently with it. In the Methodology course, students will learn about the various types of research studies with the outcome of developing a proposal for a project. The Data Analysis course provides students with the tools to conduct and analyze this project. In a sense, Research Methodology will answer the question “what” and Data Analysis will provide the “how.”

Students will master the basics of statistical analyses as applied to the health sciences, including data presentation and summary measures, probability and probability distributions, measures of association, hypothesis testing, and modeling.

Using statistical software packages, students will gain hands-on experience in analyzing data and interpreting results. Emphasis will be placed on understanding the results of an analysis, rather than simply reporting statistical output.

By the end of this course, students will be able to specify the appropriate statistical analyses for their personal research project. They will also have the skills to be discerning consumers of scientific literature and be capable of applying data analytic skills to future research endeavors.

Essentials of Teaching - ADE2000 - 1 credit hour: In this course, residents will be introduced to various educational methodologies and philosophies in teaching and learning in order to prepare them to teach in the predoctoral program.

Graduate Head & Neck Anatomy - ADE1001 - 1 credit hour: In this course, the residents will develop a working knowledge of the gross anatomy of the head and neck relevant to the practice of dentistry and in particular the resident's specific specialty (i.e., orthodontics) as well as core knowledge sufficient for appropriate consultation and collaboration with medical colleagues.

Graduate Occlusion - ADE1007 - 1 credit hour: This course will provide an overview of contemporary occlusal concepts and their evolution, establish a working knowledge of occlusion as it relates to diagnosis, treatment planning and treatment, and promote interaction among dental providers and specialists in the treatment of patients with occlusal problems and/or disturbances.

Graduate Oral & Maxillofacial Pathology - ADE1011 - 1 credit hour: The purpose of the course is to provide students a graduate level training experience in Oral and Maxillofacial Pathology. The course will serve to review and reinforce basic oral pathology learned in the pre-doctoral curriculum as well as expand and discuss more advanced and controversial topics. A portion of the course will be case based; applying principles of problem based learning where critical thinking and solving problems is emphasized. This later approach will focus on the patient's presenting signs and symptoms, and through the application of basic principles of the biomedical sciences, work toward developing a differential diagnosis, establishing a definitive diagnosis and deciding on the most appropriate course of treatment for the individual patient. The course will include the etiology, pathogenesis, clinical and microscopic features, treatment and prognosis, as well as differential diagnosis important for the practicing specialist in orthodontics.

Graduate Oral Radiology - ADE1014 - .5 credit hours: In this course, the resident will develop advanced skills in panoramic, cephalometrics radiology and Direct Dental Imaging, both intraorally and extraorally as well as Cone Technology Digital Imagery.

Introduction to Cephalometrics - ADE5000 - 1 credit hour: In a number of dental specialties (most prominently orthodontics and oral and maxillofacial surgery), the cephalometric technique provides a standard means of description, treatment planning, evaluation, and communication. Technical ability, rather than choice of measurements, is often the limiting factor in cephalometric analysis. This course will emphasize "hands-on" experience with landmark localization, tracing, and measurement.

Orthodontic Clinic I-V - ADE5001-5005 - 10 credit hours each: The purpose of this course is to educate residents in clinical patient management utilizing Orthodontic Records Taking (ABO Standards), Oral Diagnosis, Treatment Planning, Cephalometrics, Radiology, Orthodontic Appliance Design, Orthodontic Techniques, Dentofacial Orthopedics, Biomechanical Principles, Interdisciplinary Comprehensive Care, and Clinical Orthodontic Treatment/Case Management.

Orthodontic Literature Review I- IV - ADE5021-5024 - 0.5 credit hours each: This course will provide residents with a sound background in current and classical orthodontic and related literature. Articles from the American Board of Orthodontics' suggested reading list are used along with current articles selected by the course director. The articles will be discussed in this course and are supplemented with articles from Orthodontic Seminars.

Orthodontic Seminar I-IV - ADE5010-5013 - 5 credit hours each: This course provides the resident with basic scientific information in biomechanical principles, and orthodontic techniques required to diagnose, treatment plan, correct routine and complex malocclusions of the growing and skeletally mature patient.

Orthognathic Surgery I-II - ADE5031-5032 - 1 credit hour each: This seminar is designed to provide the resident with the knowledge to diagnose a surgical case, take proper surgical records, develop a problems list, treatment objectives, establish a surgical treatment plan and learn how to do model surgery and construct a surgical splint 12

Orthognathic Surgery III-IV - ADE5033-5034 - 1 credit hour each: This seminar is designed to provide the resident with the knowledge and experience to diagnose, develop a problems list, treatment objectives and design an orthognathic surgical treatment plan.

Research - ADE1084 - 6 credit hours: This course is designed to monitor the progress made by all residents on their research project.

Research Methodology - ADE1080 - 1 credit hour: This course is the first in a sequence of four courses, the ultimate goal of which is for the student to propose, conduct, and document a research project that will make a meaningful contribution to scientific knowledge and better the health of the community consistent with the mission of the A. T. Still University. The outcome of this four-course sequence will be a publication-quality paper. In addition, students will be able to use this paper as the basis for requesting funding to carry out further research on their topic.

The Research Methodology course will inaugurate this process by providing students with a firm grounding in the process of healthcare research. This will include an understanding of the strengths and weaknesses of the basic types of research studies including case studies, case series, observational studies, clinical trials, and meta-analyses. Students will be required to explore topics and sources of data for their research projects.

By the end of this first course students will have developed and submitted a detailed proposal of their research project, including a research question or hypothesis, a review of the literature, and a data acquisition and analysis plan.

Research Writing I-II - ADE1082-1083 - 0.5 credit hours each: In these courses, the resident will examine in practical terms the elements required for the successful publication of a medical/dental journal article or clinical case review.

- Research Writing I – ADE1082 - 0.5 credit hours: The ability to present information in a clear and precise manner is a prerequisite for any professional writing. Working in the context of the individual student’s research paper, emphasis will be placed on proper language usage, the principles of composition, and developing a readable style. Students will explore appropriate peer-reviewed journals, including electronic publications, to which to submit their papers for publication and the specific requirements of these journals, including reference and format styles.
- Research Writing II – ADE1083 - 0.5 credit hours: By the end of this course students will have completed and submitted their research paper. In this course, students will use their research project papers as a basis of applying for funding for a future project. This project will better the health of the community consistent with the mission of the A. T. Still University.

Students will be introduced to the theory and practice of grant writing and identifying sources of funding. Using this knowledge, students will identify possible sources of funding, write grant applications tailored to the requirements of these sources, submit these applications, and follow-up as needed. Students will also learn about the history, rationale, and mechanics of institutional review boards.