

PP-ATP Curriculum Map

I. Provide students with in-depth didactic and practical educational experiences in exercise physiology.

Long & Short Term Goals:

Students will:

1. demonstrate advanced understanding of exercise physiology concepts and principles
 - appropriately complete course assignments in graduate level exercise physiology courses
2. demonstrate the ability to design and implement sound research projects in exercise physiology
 - complete review of literature for thesis or in-class research project topics
 - develop thesis or in-class research project topics
 - select and design appropriate research methodology for thesis or in-class projects
 - select and complete data analysis appropriate for thesis or in-class projects
3. demonstrate the ability to utilize equipment and technologies associated with exercise physiology in fitness assessment and data collection
 - develop competency in exercise physiology techniques and in operation of exercise physiology laboratory equipment such as the metabolic cart, body composition assessment equipment, lactate analyzer, residual volume analyzer, Biodex Multi-Joint System 3 Dynamometer, Chotalon and Microfet handheld dynamometers, Duel Photron Absortometry (DEXA), Isokinetic Upper Extremity ergometer, Bioelectrical impedance, EMG, heart rate variability, etc.
 - appropriately complete course assignments in graduate level exercise physiology courses
4. demonstrate the ability to critically evaluate published research in exercise physiology related Athletic Training research.
 - actively participate in critical evaluation of research in bi-weekly journal club meetings and classmates' thesis proposals and defenses.
 - complete condensed article reviews as part of course requirements

Plan:

1. Provide students with advanced coursework opportunities in exercise physiology instructed by experienced faculty.

- KRS 601 –Physiology of Exercise
 - KRS 602 – Metabolic Analysis
 - KRS 603 – Advanced Fitness Assessment and Exercise Prescription
 - KRS 604 – Body Composition & Weight Management
2. Provide 2nd year students with mentoring responsibilities to assist 1st year students in thesis topic selection, methodological development and implementation.
 - KRS 614 – Research Practicum in Athletic Training
 - KRS 620 – Seminar in Athletic Training
 3. Provide students with the skills and knowledge required for the creation of sound research methodologies.
 - KRS 614 – Research Practicum in Athletic Training
 - KRS 620 – Seminar in Athletic Training
 - KRS 673 – Research Methods in Kinesiology
 4. Provide students with opportunities to participate in on-going faculty research in exercise physiology and biomechanics.
 - KRS 614 – Research Practicum in Athletic Training
 5. Development of proficiency in utilizing research tools in areas of exercise physiology and athletic training.
 - KRS 601 – Physiology of Exercise
 - KRS 602 – Metabolic Analysis
 - KRS 603 – Advanced Fitness Assessment and Exercise Prescription
 - KRS 604 – Body Composition & Weight Management
 - KRS 614 – Research Practicum in Athletic Training
 - KRS 616 – Advanced Orthopedic Assessment
 - KRS 621 – Advanced Therapeutic Exercise
 - PH 655 - Biostatistics

Outcomes:

1. Successful completion of exercise physiology coursework
2. Completion of theses in exercise physiology / athletic training
3. Submission of abstract to local, regional, or national professional conventions and symposia
4. Completion of manuscript for journal submission based on thesis research.

5. Obtain professional certification in exercise physiology related areas (ie. CSCS or similar credential)
6. Pursue further education and/or experiences in exercise physiology related settings.

II. Provide students with an in-depth educational experience in human anatomy.

Long & Short Term Goals:

Students will:

1. demonstrate advanced understanding of human anatomy content and principles
 - complete course assignments in graduate level anatomy courses (ANAT 603 & 604)
2. demonstrate advanced understanding of anatomical structures in human cadaver
 - complete gross anatomy laboratory dissections in ANAT 603 & 604
3. demonstrate the ability to apply principles of human anatomy to orthopedic evaluation and rehabilitation
 - complete course assignments in athletic training core courses and maintain the UHM Graduate Division required cumulative 3.0 grade point average
 - demonstrate the ability to apply and assimilate involved anatomical structures to clinical athletic training principles in rehabilitation and evaluation

Plan:

1. Provide students with advanced coursework opportunities in human gross anatomy in a resource-rich educational environment within the John A Burns School of Medicine.
 - ANAT 603 – Lower Extremity, Thorax and Abdomen
 - ANAT 604 – Upper Extremity, Head, Neck and Spine
2. Provide students with opportunities to facilitate learning of anatomical concepts to peers, colleagues and other medical / health professionals.
 - Anatomy workshops and seminars conducted by the department of Anatomy, Biochemistry, Physiology and Reproductive Biology
 - ANAT 603 – Lower Extremity, Thorax and Abdomen

- ANAT 604 – Upper Extremity, Head, Neck and Spine
3. Foster student assimilation of anatomic concepts into clinical proficiency in orthopedic evaluation and rehabilitation
 - KRS 616 – Advanced Orthopedic Assessment
 - KRS 621 – Advanced Therapeutic Exercise

 4. Foster student integration of anatomic contents into athletic training concepts and practices
 - KRS 616 – Advanced Orthopedic Assessment
 - KRS 621 – Advanced Therapeutic Exercise
 - KRS 620 - Athletic Training Seminar

Outcomes:

1. Successful completion of anatomy coursework and maintain the UHM Graduate Division required cumulative 3.0 grade point average
2. Serve as teaching assistant for anatomy seminars and workshops conducted by the Department of Anatomy, Biochemistry, Physiology and Reproductive Biology (ie. Hawaii state judges meeting anatomy seminar)
3. Successful completion of orthopedic assessment and rehabilitation coursework

III. Prepare students to pursue continuous education and career opportunities in academia in Athletic Training and allied health.

Long & Short Term Goals:

Students will:

1. develop competency as instructors in university courses
 - increase depth and breadth of knowledge in Athletic Training and Kinesiology through required coursework
 - serve as instructors for undergraduate university courses
 - develop personal teaching techniques and philosophies

- develop skills in oral presentation
 - utilize a variety of teaching methods in delivery of course content via mentorship of 2nd year AATP students
 - utilize technology in the dissemination of course content
2. demonstrate the ability to utilize equipment and technologies in the completion of research in exercise physiology, athletic training and biomechanics.
 - demonstrate proficiency in operating metabolic analysis equipment
 - demonstrate proficiency in conducting hydrostatic weighing assessment of body composition
 - demonstrate proficiency in operating isokinetic equipment
 - demonstrate proficiency in utilizing biomechanical analysis software
 - demonstrate proficiency in operating optical motion capture equipment
 3. develop advanced understanding of issues related to athletic training curriculum development, implementation and administration
 - participate in duties related to curriculum administration under the direction of the program director and associate program director
 - participate in clinical education of entry-level athletic training students as approved clinical instructors (ACI)
 - participate in the creation and development of curriculum related materials for recruitment, evaluation, and curriculum administration

Plan:

1. Provide students with constructive evaluation of teaching performance
 - Department administration of Course and Faculty Evaluation (CAFÉ) forms each semester for all courses (summative evaluation)
 - Faculty and peer mentoring in course teaching responsibilities (formative evaluation)
2. Provide students with opportunities to collaborate with faculty and peers regarding teaching styles, techniques and philosophies
 - Semi-semester evaluations of teaching performance and advising with supervising PhD student
 - KRS 620 – Seminar in Athletic Training
3. Provide students with opportunities to participate in the implementation and development of athletic training curricula

- ACI opportunities
 - Assigned duties in student recruitment, curricular evaluation and administration
 - Hawaii Athletic Training Student Organization administration and management
4. Provide students with opportunities to utilize a broad variety of equipment and technologies in coursework, clinical experiences and the implementation of research protocols.
- KRS 601 –Physiology of Exercise
 - KRS 602 – Metabolic Analysis
 - KRS 603 – Advanced Fitness Assessment and Exercise Prescription
 - KRS 604 – Body Composition & Weight Management
 - KRS 613 – Clinical Practicum in Athletic Training
 - KRS 614 – Research Practicum in Athletic Training
 - KRS 616 – Advanced Orthopedic Assessment
 - KRS 621 - Advanced Therapeutic Exercise

Outcomes:

1. Positive feedback from CAFÉ instrument (summative evaluation)
2. Creation of materials required for instruction of university courses
3. Satisfactory completion of coursework and research assignments utilizing equipment and technologies
4. Attain instructor certification in CPR for the lay person and professional rescuer