

University of Houston



Master of Athletic Training Program
Educational Framework
2020-2021

Introduction

The Master of Athletic Training (MAT) program at the University of Houston is one of the only AT programs in the country to be housed at a major university in one of the largest cities in the country. The opportunities available for the program's students are endless and are still being developed. Over the course of the last year, the faculty of the MAT program have worked to integrate all of the components of the program to reflect contemporary athletic training education. The previous mission, goals, objectives, and assessment measures have been revised based on a review of the previous documents and philosophy, as well as the expectations for quality improvement.

Core Principles

1. Student competence
 - a. Students will be prepared to be competent, compassionate clinicians.
2. Provide varied, quality didactic and clinical experience that allow for personal and professional growth.
 - a. Expect that students will be professional contributors to the profession
 - b. Expect that students will collaborate with other healthcare providers
 - c. Use the opportunities available in the greater Houston area to expand the student's clinical education.
3. Team approach to practice

Program Design and Integration

Curricular Design-

The new curricular design assumes the students are entering the program with a strong science background completing all required pre-requisite courses. In addition to the required pre-requisites designated by the CAATE, UH MAT students are required to complete an additional A & P 1 & 2, Biomechanics, Exercise Physiology, Motor Learning, Psychology, Nutrition and Statistics prior to entering the program. This allows for maximum credit hours within the MAT Program to be used specifically for Athletic Training knowledge and skills. The curriculum (both didactic and clinical) is designed with Bloom's Taxonomy as a conceptual framework to progress the student from a novice to a competent and compassionate practitioner within the two-year plan. The students are evaluated using a modification of the Athletic Training Milestones, such that first year students and students who are ready to graduate are assessed with the same evaluation, yet expected to progress through the advancing likert scale to ultimately show the "MAT Student is performing with behaviors ready for unsupervised practice (graduating professional student)". Additionally, the clinical education courses are designed to logically progress the student from a novice clinician to one who is expected to provide increasingly complex and autonomous patient care.

Curricular Planning

The curriculum is a two-year degree emphasizing didactic and clinical experiences. Starting in the first semester (Summer) students participate in three (3) foundational courses and their first clinical experience. This first summer session is focused on a better understanding of anatomy, emergency care and an introduction into the medical evaluation of systems combined with the basics of pharmacology. During the second semester, (Fall) students focus on lower extremity evaluation and an introduction to therapeutic intervention. In addition, the students are introduced to research in athletic training so that they can learn to use evidence-based practice throughout the rest of the program and after graduation as they transition to practice. The third semester's focus is on upper extremity evaluation and the students are introduced to health care administration. The clinical experience for this semester also introduces the students to interprofessional education. At the end of the first year, students are required to complete an Objective Structured Clinical Examination (OSCE) that serves as a "gate" for the second year of the program. Any student that does not meet the program expectations on the OSCE must go through remediation and re-test. Poor performance on the 2nd attempt at the OSCE may result in the student being dismissed from the program.

The fourth semester, during the second summer of the program, the student completes the second part of the medical evaluation focusing on pathophysiology and a deeper understanding of pharmacology, as well as evaluation of the Head, Neck and Spine. The clinical experience during this semester focuses on medical conditions, surgical intervention of orthopedic injuries and a rehabilitative intensive experience. Prior to the 5th semester, a review of patient encounters and clinical skills for each student is completed by the faculty. If the student is deficient in a particular skill or patient population, the clinical education coordinator(s) arrange for the student to complete those deficiencies through simulation and/or use of standardized patients.

The Fifth semester, Fall of the 2nd year, the students are completing the 2nd therapeutic interventions course that requires the student use critical thinking and problem solving skills to formulate interventions and plans of care. The students also take a human performance course during this semester. These two courses together theoretically will help the student hone their rehabilitation and return-to-participation skills as well as appreciate the use of prevention techniques. The final semester serves as a capstone for the student with requirements to prepare a case study for presentation/publication to a professional organization and completion of projects in Seminar in Athletic Training that focus on the ethical and legal obligations of the athletic trainer. The student also completes Behavior Health this semester and their last clinical experience, which is where the student engages in their immersive clinical experience. It is in this final semester, that the student is expected to demonstrate the behaviors congruent with unsupervised practice and autonomous patient-care.

Curricular Sequencing

Summer 1

ATP	6301	Anatomy	3
ATP	6302	Emergency Care	3
ATP	6303	Gen Med/Pharm 1: Systems and Evaluation	3
ATP	6191	Clinical Experience 1	1
		Total Hours	10

Fall 1

ATP	6313	L. Extremity Orthopedic Evaluation	3
ATP	6113	L. Extremity Orthopedic Evaluation Lab	1
ATP	6311	Research in AT	3
ATP	6312	Therapeutic Intervention 1	3
ATP	6112	Therapeutic Intervention 1 Lab	1
ATP	6192	Clinical Experience 2	1
		Total Hours	12

Spring 1

ATP	6323	U. Extremity Orthopedic Evaluation	3
ATP	6123	U. Extremity Orthopedic Evaluation Lab	1
ATP	6324	Healthcare Administration	3
ATP	6293	Clinical Experience 3	2
		Total Hours	9

Summer 2

ATP	7302	Gen Med/Pharm 2: Pathophysiology	3
ATP	7301	Head, Neck & Spine Orthopedic Evaluation	3
ATP	7101	Head, Neck & Spine Orthopedic Evaluation Lab	1
ATP	7194	Clinical Experience 4	1
		Total Hours	8

Fall 2

ATP	7311	Human Performance	3
ATP	7312	Therapeutic Intervention 2	3
ATP	7112	Therapeutic Intervention 2 Lab	1
ATP	7295	Clinical Experience 5	2
		Total Hours	9

Spring 2

ATP	7321	Behavioral Health	3
ATP	7322	Seminar in Athletic Training	3
ATP	7196	Clinical Experience 6	1
ATP	7297	Case Study Prep & Submission	2
		Total Hours	9

Total Program Hours **57**

Assessment Plan

The MAT program assessment plan, developed and recently revised by a collection of stakeholders including the three core MAT program faculty members as well as University officials, to serve as a framework by which the MAT program can be assessed and, improved in order to deliver quality opportunities for learning, inquiry, discovery, and advocacy. By design, the assessment plan allows for measurement of student learning, quality of instruction, quality of clinical education, and overall program effectiveness.

The first goal of the MAT program is to prepare MAT students to become competent clinicians. This goal is assessed using a variety of methods. First, at the conclusion of their fourth semester (i.e. Summer II), MAT students must pass (i.e. 85% or higher) an Objective Structured Clinical Examination (OSCE) which is assembled using didactic, laboratory, and clinical material from their first three semesters in the program. It is expected that at least 80% of MAT students will score at least 85% or higher. MAT program core faculty will participate in the exam and will each score the students OSCE exam. This outcome is assessed annually. To assess clinical competency throughout their time in the program as well as their potential for advancement within the clinical courses (e.g. ATP 6191, 6192, etc.), MAT students are assessed by program preceptors. Each semester, MAT students are assessed on areas relevant to learning, inquiry, discovery, and advocacy using the MAT Program Preceptor Evaluation of MAT Student (i.e. "PES") form. For the assessment plan, MAT students are evaluated using a progressive scale that aligns with the Athletic Training Milestones assessment. Specifically, the MAT program expects that at least 80% of 2nd year MAT students score a 2 out of 3 on the scale (equivalent to *MAT student is performing with the behaviors of a learner who is advancing and demonstrating improvement*) on questions 5-17 of the PES form, and at least 80% of all MAT students are expected to score at least a "3 out of 3 – MAT Student is performing with behaviors ready for unsupervised practice (graduating professional student)" on the same questions. These outcomes will be assessed annually by all MAT program core faculty. Please see the uploaded Preceptor Evaluation of Student for the content of questions 5-17. A sample of how this data will be evaluated can be found in the attached "Cohort 2020 PES data" file, though it should be noted that this data reflects the PES form developed from the 2012 standards rather than the 2020 standards which will be implemented on this form starting with the Summer 2020 semester.

Student self-assessment is vital for the success of the MAT program, and the self-assessment, which is developed using identical questions as the PES form, will be used to evaluate MAT program quality in two ways. First, at the end of each semester, MAT program core faculty will evaluate the responses to determine whether at least 80% of all 2nd Year MAT Students rate themselves at least a "2 out of 3 (*MAT student is performing with the behaviors of a learner who is advancing and demonstrating improvement (intermediate professional student)*)" on questions 5-17 on the Student Self-Evaluation. Additionally, it will be determined whether at least 80% of all MAT students will rate themselves a "3 out of 3– *MAT Student is performing with behaviors ready for unsupervised practice (graduating professional student)*".

Because the MAT student self-evaluation is derived from identical questions as the PES form, the MAT program core faculty will also look to assess agreement between the two forms. The expectation is that there will be a high degree of agreement between the two forms' ratings for each MAT student. In cases where there is a high degree of disagreement, at the end of each semester, MAT program faculty will meet with the MAT student to collectively review the forms in order to review the student's performance expectations and Self-assessment scores. The final outcome associated with the first goal of the self-assessment is specific to preparing MAT students to enter the workforce as successful contributors to the field of athletic training and healthcare. This outcome is assessed in a variety of ways. First, the MAT program requires that MAT students contribute to the body of knowledge in medicine. Therefore, in order to meet graduation requirements, all MAT students are required to submit one clinical case report to a professional conference or journal. Second, because of the value that understanding data analysis can have on individual program effectiveness, MAT students will have a final project in ATP 6311 that requires them to analyze injury data from their clinical site and report trends specific to injury rates and gender/position/class (etc.) injury occurrence. To meet this outcome, it is expected that all students enrolled in ATP 6311 will score at least 85% or higher on this project, and this outcome will be assessed by the ATP 6311 course instructor. Please see the uploaded rubric for the ATP 6311 project. Two additional outcomes specific to goal 1 are used to determine the effectiveness of the MAT program at employing athletic trainers in the workforce. First, it is expected that at least 80% of all MAT students accepted into the program will graduate on time (i.e. at the end of their sixth semester in the program). Furthermore, it is expected that at least 80% of program graduates will be employed as an athletic trainer in either clinical practice or enrolled in an advanced education program (e.g. PhD, EdD, DAT, etc.). These two outcomes are assessed annually, in May, by MAT program core faculty and reported on the MAT website.

The second goal of the MAT program is specific to quality of education provided by the program. This quality is specific to both didactic and clinical education instruction. To assess this goal, several outcomes are utilized. First, didactic education evaluation occurs through the university-mandated Faculty Course Evaluation provided at the end of each academic semester. The MAT program strongly and repeatedly encourages all MAT students to complete this form, emphasizing the anonymous nature of the evaluation. This evaluation allows for Likert-type scoring (with comparisons to department, college, and university scores), and allows for free/open comments from the individual students. Course instructors are provided the results of this evaluation approximately 2 months after the completion of the course. To assess this outcome, it is expected that MAT program faculty receive at least a "3" out of a possible "5" on sections 1 and 2 of the form. This outcome is assessed by MAT program core faculty upon release of the scores by the University.

Also contributing to this outcome is the requirement that MAT program faculty (all who provide didactic instruction) pursue continuing education units, with a preference that the education – when available – is specific to their clinical expertise through relevant providers such as CAATE, NATA, SWATA, ATEC, etc.

Clinical experiences are a vital component of the MAT student's overall experience, and it is important that students are provided a quality clinical education experience. To assess the quality of clinical education instruction, MAT students complete the MAT Student Evaluation of Preceptor (SEP) form at the completion of their semester clinical education assignment. This form assesses preceptors on aspects specific to clinical education standards. To evaluate this outcome, it is expected that at least 80% of MAT students will report at least a "2" out of "3" on their SEP form. 1st year MAT students complete two 8-week clinical education assignments per long semester, while 2nd year MAT students complete a full semester clinical education assignment, and MAT program core faculty assess the results of this form at the completion of the assignment in order to determine preceptor effectiveness.

Clinical sites and preceptor qualifications are assessed annually in May by one of the two MAT program clinical coordinators. The assessment is outlined by the MAT Program Evaluation of Preceptor and Clinical Site form. To assess this outcome, all sites and preceptors must be 100% compliant with the requirements outlined on this form. Any non-compliances must be corrected before MAT students can be assigned to that site for clinical education. The results of this form are reviewed by all MAT program core faculty at the end of May.

The third outcome of this goal is specific to providing opportunities for students to be contributors to the profession. As outlined in Goal 1, MAT students must submit a clinical case report to a professional conference or journal in order to meet graduation requirements. Although acceptance of their case report is not required for graduation, a program goal – specific to the quality of those submissions – is that at least 80% of all submissions are accepted for presentation or publication at a professional conference or journal. At present, there is a 100% acceptance rate for submitted case reports for graduating cohorts 2016 – 2019. This outcome is assessed by MAT program faculty annually during the summer semester.

The fourth outcome of this goal is specific to providing opportunities for MAT students to collaborate with other healthcare providers. To meet this outcome, the MAT program has agreements with several organizations "Partnerships" in the area that provide educational opportunities. It is expected that all MAT students, during their time in the program, attend at least one professional conference per each of their two academic years enrolled in the MAT program. This goal is assessed annually at the end of the academic year (i.e. May) by MAT program core faculty. In addition, MAT students are expected to collaborate at one of several supplemental clinical education events. These include workshops, podcasts, or unique clinical education opportunities (e.g. Ironman or marathon events) that occur throughout the year. It is expected that 100% of MAT students participate in at least two supplemental clinical education events per academic year. This outcome is assessed by MAT program faculty annually at the end of each academic year.

The third goal of the MAT program is focused on interprofessional education and professional practice. To assess this goal, one outcome evaluates the quality of interprofessional education (IPE). The MAT program arranges several IPE opportunities throughout the academic year, and all MAT students are required to attend. Upon the completion of an IPE session, MAT students

are provided a survey to complete which is used to assess this goal. In order to assess the effectiveness of the IPE session, MAT program core faculty evaluate the surveys in order to determine whether 80% of MAT students rated at least a “4” out of “5” on the questions *I will be able to apply this information in the field* and *I understand the roles of the (profession) and the certified athletic trainer in this specific situation* in order to determine whether additional similar IPE opportunities would be of benefit to the MAT students.

Compassionate and ethical practice are an essential component of professional practice, and the MAT program wants to ensure that its graduates emulate this expectation. ATP 6324 will include an assignment specific to understanding and interpreting the NATA Code of Ethics, BOC Standards of Professional Practice, and local/state/federal laws specific to the practice of athletic training. It is expected that 100% of MAT students will be able to demonstrate understanding in these areas, as determined by the course instructor’s evaluation of this assignment.

MAT student ethics are also assessed by program preceptors. On the PES form, preceptors will rate whether the MAT student *engages in clinical experiences in a manner that is congruent with the ethical standards of the profession*. It is expected that 100% of MAT students score at least a “2” out of “3” on this question. MAT program core faculty will assess this outcome at the end of each clinical rotation.

Finally, The MAT program has developed an Oath of Professional Practice which includes behaviors expected for an ethical athletic trainer. 100% of MAT students take this oath prior to graduation, and it is witnessed by MAT program core faculty, program stakeholders, and family and friends in attendance.

An outline of the Goals, Outcomes, and Measurable Objectives may be found in the pages to follow.



Mission- Consistent with the mission of the University of Houston (UH) and the Department of Health and Human Performance (HHP), the Master of Athletic Training (MAT) Program will provide quality opportunities for learning, inquiry, discovery, and advocacy. In addition, the MAT Program will facilitate personal and professional growth through didactic, clinical, and professional contributions and collaboration to prepare graduates to be competent and compassionate professionals. Graduates of the MAT Program will have the knowledge, skills, and abilities to pass the Board of Certification (BOC) exam for Athletic Training, and practice within an interprofessional healthcare team as an Athletic Trainer.

Goals

Goal 1: Prepare students to be competent clinicians using knowledge, skills, and abilities (KSA's) that successfully pass the BOC Exam for AT and enter the workforce as successful contributors to the field of AT and healthcare.

Goal 2: Provide quality opportunities for learning, inquiry, discovery, and advocacy, along with personal and professional growth through didactic, clinical, and professional contributions and collaboration.

Goal 3: Prepare students to be compassionate AT's who advocate for their patients and the profession and are able to practice within an interprofessional healthcare team.

Outcomes

Outcome 1: Prepare students to pass the BOC Exam.

Outcome 2: Prepare students to be competent clinicians.

Outcome 3: Prepare students to enter the workforce as successful contributors to the field of AT and Healthcare

Outcome 1: Provide quality didactic curriculum taught by faculty with contemporary expertise in respective field(s).

Outcome 2: Provide varied, quality clinical experiences that challenge the student and allow for personal and professional growth.

Outcome 3: Provide the opportunity for students to be professional contributors to the profession and to collaborate with other healthcare providers.

Outcome 1: Provide students the ability to participate in and successfully complete interprofessional education within the curriculum.

Outcome 2: Graduates will be ready to practice in a manner that is compassionate and consistent with professional practice.



GOAL 1	Measurable Objectives	Assessment Method	Course (s)
<p>Outcome 1- Prepare students to pass BOC Exam.</p>	<ul style="list-style-type: none"> At least 80% of MAT Students will pass the BOC Exam on the first attempt. 	<p>BOC Exam</p>	<p>N/A</p>
<p>Outcome 2- Prepare students to be competent clinicians.</p>	<ul style="list-style-type: none"> At least 80% of MAT Students will score at least an 85% or above on the Objective Structured Clinical Exam (OSCE) at the end of the first year of the program. At least 80% of all 2nd Year MAT Students will score at least a “2 out of 3 – “MAT student is performing with the behaviors of a learner who is advancing and demonstrating improvement (intermediate professional student) on questions 5-17 on the Preceptor Evaluation of Student. Additionally, at least 80% of all MAT Students will score at least a “3 out of 3 – MAT Student is performing with behaviors ready for unsupervised practice (graduating professional student)” on the same questions. At least 80% of all 2nd Year MAT Students will rate themselves at least a “2 out of 3 – MAT student is performing with the behaviors of a learner who is advancing and demonstrating improvement (intermediate professional student)” on questions 5-17 on the Student Self-Evaluation. Additionally, at least 80% of all MAT Students will rate themselves a “3 out of 3– MAT Student is performing with behaviors ready for unsupervised practice (graduating professional student)” on the same questions. 	<p>Objective Structured Clinical Exam (OSCE)</p> <p>Preceptor Evaluation of MAT Student</p> <p>MAT Student Self-Assessment</p>	<p>ATP</p>



Outcome 3: Prepare students to enter the workforce as successful contributors to the field of AT and Healthcare	<ul style="list-style-type: none">• All students will submit Clinical Case Studies to professional organizations as part of ATP 7322 / ATP 7297• Students will score 85% or higher on the Clinical Case Study rubric.• Students will score at least 85% or higher on the final project in Research in Athletic Training (ATP 6311) testing the ability of the student to be a consumer of research.• At least 80% of graduates will be employed as an AT or in advanced education.• At least 80% of all MAT Students accepted to the MAT Program will meet all the on-time graduation requirements to satisfy the degree of Master of Athletic Training	Case study submission to professional organization Alumni survey Retention and Graduation Data reported on MAT Program website.	ATP 6191 ATP 6192 ATP 6293 ATP 6311 ATP 7194 ATP 7295 ATP 7196 ATP 7297 N/A



GOAL 2	Measurable Objectives	Assessment Method	Course (s)
<p>Outcome 1- Provide a quality didactic curriculum taught by faculty who have contemporary expertise in their respective field(s).</p>	<ul style="list-style-type: none"> At least 70% of MAT Students will report at least a “3 out of 5 (3/5)” in <i>Section 1 “Instructor”</i> and <i>Section 2 “Common University-Wide Items”</i> in the Faculty Course Evaluation Reports administered by the University of Houston’s Measurement and Evaluation Center. All MAT Program Faculty (full-time and adjunct) pursue continuing education units within their specified area of clinical expertise. 	<p>MAT Student evaluation of course instructor distributed by the University of Houston’s Measurement and Evaluation Center at the end of each semester.</p> <p>Attendance at professional conferences (eg. NATA, SWATA, CAATE, ATEC, etc.)</p>	<p>Across all ATP Courses</p> <p>N/A</p>
<p>Outcome 2- Provide varied, quality clinical experiences that challenge the student and allow for personal and professional growth.</p>	<ul style="list-style-type: none"> At least 80% of MAT Students will report at least a 2 out of 3 on question 1-12 on the MAT Student Evaluation of Preceptor. 100% of MAT Program clinical sites will receive a “3” on all questions from the MAT Program Evaluation of Preceptor and Clinical Site at the end of each academic year. At least 80% of all 2nd Year MAT Students will score at least a “2 out of 3 – “MAT student is performing with the behaviors of a learner who is advancing and demonstrating improvement (intermediate professional student) on questions 5-17 on the 	<p>MAT Student evaluation of preceptor</p> <p>MAT Program evaluation of Preceptor and Clinical Site</p> <p>Preceptor Evaluation of MAT Student</p>	<p>ATP 6191 ATP 6192 ATP 6293 ATP 7194 ATP 7295 ATP 7196</p>



University of Houston, Master of Athletic Training Program Educational Framework

	<p>Preceptor Evaluation of Student. Additionally, at least 80% of all MAT Students will score at least a “3 out of 3 – MAT Student is performing with behaviors ready for unsupervised practice (graduating professional student)” on the same questions.</p>		
<p>Outcome 3 – Provide opportunities for students to be professional contributors to AT.</p>	<ul style="list-style-type: none"> • At least 80% of all MAT Students will be accepted to a professional conference or journal for presentation (poster or oral) and/or journal publication. • 100% of all MAT Students will submit a Clinical Case Study to a professional organization. 	<p>Professional organizations acceptance policies. ATP 7322</p>	<p>All Clinical Education Courses and ATP 7297 <i>“Case Study Prep & Submission”</i></p>
<p>Outcome 4- Provide opportunities for students to collaborate with other healthcare providers.</p>	<ul style="list-style-type: none"> • 100% of MAT Students will attend at least one professional conference per academic year. • 100% of MAT Students will participate in at least two supplemental clinical education events with an MAT Program Strategic Partner. 	<p>Attendance at various professional conferences. Participation in supplemental clinical education at Houston Marathon, IRONMAN, GHATS, Sports Medicine Update</p>	<p>ATP 6191 ATP 6192 ATP 6293 ATP 7194 ATP 7295 ATP 7196</p>



GOAL 3	Measurable Objectives	Assessment Method	Course (s)
<p>Outcome 1- Provide students the ability to participate in and successfully complete interprofessional education within the curriculum.</p>	<ul style="list-style-type: none"> All students will successfully complete and actively participate in planned interprofessional education. At least 80% of the students will rate at least a 4 out of 5 on question one (1) "I will be able to apply this information in the field" and three (3) "I understand the roles of the registered dietitian and the certified athletic trainer in this specific situation" of the 	<p>Documentation of participation from IPE event</p> <p>Evaluation of interprofessional experience rubric</p>	<p>Clinical Education Courses dependent on schedule</p> <p>ATP 6293</p> <p>ATP 7196</p>
<p>Outcome 2- Graduates will be ready to practice in a manner that is compassionate and consistent with professional expectations.</p>	<ul style="list-style-type: none"> 100% of MAT Students will be able to demonstrate knowledge of the NATA Code of Ethics, BOC Standards of Professional Practice, as well as federal, state and local laws for the practice of AT. 100% of MAT Students will take the MAT Program Oath of Professional Practice at the MAT Program Hooding Ceremony at the end of the MAT Program curriculum. 80% of MAT Students will score at least a 2 out of 3 on question 14 "MAT Student engages in clinical experiences in a manner that is congruent with the ethical standards of the profession." 	<p>Written assignment in ATP 6324 "Healthcare Administration"</p> <p>Hooding Ceremony</p> <p>Preceptor Evaluation of MAT Student</p>	<p>ATP 6324</p> <p>N/A</p> <p>All clinical education courses.</p>



University of Houston, Master of Athletic Training Program Educational Framework