This handbook is intended to supplement the University Catalog. It is your responsibility to become acquainted with other university resources, policies and procedures.
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Main line 404.894.1610 gradinfo@mail.gatech.edu
(Savant Bldg., Third Floor)

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Katie Tudini, Assistant Director of International Student and Scholar Services 404.894.7475 Katie.Tudini@oie.gatech.edu

**Registrar's Office (Tech Tower)** 404.894.4150 (Tech Tower, First Floor)
Degree Certification
GT Veteran’s Benefits Coordinator 404.894.4953 veterans@registrar.gatech.edu
Tuition Classification
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**Student Services**
John Stein, Dean of Students 404.894.2565 john.stein@vps@gatech.edu
Cara Appel-Silbaugh, Assoc. Dean of Students 404.894.2565 cas3@gatech.edu

**Financial Aid** 404.894.4160 (Bill Moore Student Success Center, Third Floor)

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PURPOSE OF THE MSPO HANDBOOK

The MSPO (Master of Science in Prosthetics and Orthotics) program Handbook is a working document that will undergo evolution similar to the MSPO education program. As the first accredited entry-level graduate degree program in Prosthetics and Orthotics (P&O) in the United States, the Georgia Tech MSPO program continues to be a pioneer and leader. Maintaining leadership and a spirit of pioneering new approaches advancing P&O requires change and as such, modifications may occur in the guidelines, policies, procedures and other information related to the MSPO education program that appears in this Handbook. In addition, the establishment of new guidelines, policies, procedures and other information related to the MSPO program may be developed that supersede the current information that appears in this Handbook. Students will be notified in advance of any modifications to this version of the handbook and they will be provided with the new information.

The Handbook provides the student with detailed information concerning the degree requirements of the MSPO education program and an outline of pertinent guidelines, policies, procedures and other information regarding the MSPO education program, the School of Biological Sciences, the College of Sciences and Georgia Tech. The information contained in this Handbook supplements the Georgia Tech General Catalog (which is the official document of the Institute) for course requirements, graduation requirements, policies and procedures. For a complete description of the Georgia Tech academic policies, refer to the Rules and Regulations section of the Georgia Tech catalog. The Georgia Tech General Catalog can be accessed on the internet at the URL: https://oscar.gatech.edu/

Along with the information in the Handbook and the Georgia Tech catalog, you may seek information from the School of Biological Sciences. The physical location of the School of Biological Sciences is approximately 1 mile north of main campus nearest the intersection of 14th Street and Hemphill Street. The address is 555 14th Street NW, Atlanta, GA 30318. The contact person is Adrienne Durham and she may be contacted via telephone at (404.894.7658). You may also wish to contact individual faculty. Their names, email address, office and telephone numbers are on the inside front cover.

Assistance from the MSPO Education Program Faculty

The College of Science, School of Biological Sciences and MSPO education program encourages student-faculty interaction. Each faculty member with teaching responsibility is expected to post and maintain office hours for student consultation and discussion. Faculty members are also encouraged to include students when possible in research and in mutual learning opportunities. If you want to study a particular topic in greater depth than is provided through a traditional course, ask a faculty member in your area of interest to assist you to develop an individualized plan of study.

Faculty members in the MSPO program and the School of Biological Sciences and in related programs at Georgia Tech are drawn from the leading universities, medical centers, and prosthetics/orthotics facilities across North America. Collectively, they possess the expertise to teach and conduct clinical patient management, wearable technology design and research in virtually every subject area related to medicine, health science, and prosthetics/orthotics. The faculty are actively encouraged to participate in research, clinical practice and wearable technology design and other scholarly activities to keep them in touch with the fields in which they teach.
THE ADVANCEMENT OF EDUCATION IN PROSTHETICS AND ORTHOTICS – A SHORT HISTORY

The concept of an advanced education program in prosthetics and orthotics (P&O) is not new. In 1984, many years before P&O education programs were evaluated by a national accrediting body, the Education Accreditation Commission (a subsection of the American Board for Certification in Orthotics, Prosthetics, and Pedorthics Inc.) recognized the need for advanced education leading to a master’s degree (1). As a result of these recommendations, one post-professional master’s degree program was created at the University of Connecticut (2,3). The program focused on expanding the role of the orthotics and prosthetics professional in the health care system and was designed to prepare board eligible or American Board for Certification in Orthotics, Prosthetics and Pedorthics, Inc. (ABC) certified prosthetists and/or orthotists for positions of leadership in health care. Shortly following the University of Connecticut’s program, two other master’s degree education programs were created (Rutgers University in New Jersey and St. Ambrose University in Iowa). Funding shortfalls lead to the closure of both programs. The closure of these programs highlights the need for future education programs to develop support from the university’s administration, collaborating departments and medical community. In addition, it emphasizes the need for expanded funding resources from the university, the alumni, and the P&O profession to support the significant resources required to operate a successful graduate program in P&O.

Since 1992, the P&O industry officially became recognized by the American Medical Association as an allied health profession. Since then, rapid changes in managed health care, and the unprecedented growth in computer technology and material sciences have challenged the P&O profession to keep pace (4). Some have identified that the slow response by the P&O profession to keep pace with these changes is primarily due to its small size in relation to larger and more established allied health science professions (i.e. physical therapy, speech and language pathology, occupational therapy, etc.) (4). Adding to the problem of small size, there is an increasing number of orthotists and prosthetists nearing retirement. The number of individuals preparing to exit the profession is marginally offset by the number of graduates from accredited schools preparing to enter the profession (4). Combined with the expanding number of elderly persons in need of orthotic and prosthetic care (5,6,7), the expanding incidence of degenerative disorders (i.e., stroke, diabetes, etc.) other professions have begun to encroach by attempting to treat patients in need of orthotic and prosthetic services (5).

Subsequently, inter-allied health competition for orthotic and prosthetic patient care has been forcing certified practitioners to operate in areas where in some cases, other allied health professionals are better educated or just as skill-oriented (i.e. upper extremity orthotics low temperature thermoplastic splinting) (6,7). In other areas, companies manufacturing pre-made orthoses and prostheses are directly marketing to the patient (4). These developments have the potential to weaken the quality of services provided to patients in need of orthotic and prosthetic care.

The majority of individuals from other professions who are providing prosthetic and orthotic services typically possess little formal knowledge and training in P&O wearable technology design and device-user interface dynamics. Formal instruction may consist of a single short-term course. The shortcoming of these brief education programs offering peripheral content spanning a few days to a few weeks (taught in schools of pedorthics, occupational therapy, physical therapy, chiropractic, podiatric and medical programs) is that there is insufficient time to teach essential P&O theory, practical clinical skills and organized approaches to device-user performance assessment (4). Sacrificing depth in curricular content through consolidated alternative education programs in order to rapidly produce a greater number of clinical practitioners will produce individuals who remain unprepared for the demands of rapid advancement in technology and health care (8).

While the number and type of prosthetic and orthotic devices are constantly changing due to new developments in technology and materials science, the level of curriculum that provides the education and training of future certified orthotists and prosthetists has not kept pace (9). Some suggest several basic problems in P&O education exist: a.) the lack of a uniform vision of the future of P&O (10), b.) the lack of contemporary curricular design, and c.) the lack of texts designed to provide a comprehensive overview to teach students about the evolving, fragmented and complex disciplines of P&O (11). Because the Bachelor's
degree and certification by ABC have been viewed as the terminal qualification in P&O, administrative and faculty positions in P&O education programs have been typically occupied by persons with years of experience or by persons who have been internationally recruited (2). As a result, most education programs have only recently begun to employ individuals who possess an advanced degree or who possess formal training and instruction in either curriculum development or research methodology. Because this process has only recently begun, a small number of individuals from within the P&O profession have contributed to the information base through research processes and advanced education. Concomitantly, a large portion of advancements in the profession have been developed outside the P&O profession by individuals who possess formal knowledge and advanced training in medicine, allied health, and engineering (12). Unfortunately, because many of the individuals who have contributed to the research information base come from professions outside of P&O, some of the knowledge is not specifically targeted or relevant to the core of P&O wearable technology design and device-user interface performance.

Within the last few years, upgrading the level of education to a master's degree has been adopted by the prosthetics and orthotics profession as a priority for evolution. The formulation of a national master's degree curriculum guide has been adopted by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) for implementation by all U.S. schools in P&O (13).  

HISTORICAL BACKGROUND AND SETTING OF GEORGIA TECH MSPO PROGRAM

The Georgia Institute of Technology is colloquially known as “Georgia Tech” and herein may be referred accordingly in the student handbook. There are two “arms” of Georgia Tech – a research corporation (Georgia Tech Research Institute) and an educational unit (Georgia Tech). The educational unit of higher learning of Georgia Tech is composed of six colleges (Architecture, Computing, Engineering, Liberal Arts, Management and Sciences). The College of Sciences is composed of six schools (Biological Sciences,
Chemistry & Biochemistry, Earth & Atmospheric Sciences, Math, Physics and Psychology). The School of Biological Sciences is composed of three graduate programs (Master of Science in Prosthetics and Orthotics, Doctoral program in Applied Physiology with focus in P&O and Doctoral program in Applied Physiology). There is also an undergraduate certificate and an undergraduate minor in Applied Physiology.

The Master of Science in Prosthetics and Orthotics (MSPO) program is one of four focused master’s degree programs at Georgia Tech, all of which are based within the College of Sciences (in addition to Bioinformatics, Human-Computer Interaction and Quantitative Computational Finance) (http://www.sciencemasters.com/PSMProgramList/InstitutionsinAlphabeticalOrder/tabid/79/Default.aspx). Each of these programs is part of a national organization known as the Professional Science Master’s Network (http://www.sciencemasters.com/ScienceMastersHome/tabid/36/Default.aspx) which supports master’s only graduate school education programs that prepare students to become leaders in emerging interdisciplinary professions (biotechnology, pharmaceutical, healthcare product and biosciences industries). All focused master’s programs contain curricular features that involve didactic, hands on and professional components so that students can dovetail their education into present and future career opportunities.

In 2002, the Georgia Board of Regents approved the transformation of the former Department of Health and Performance Sciences (a non-degree granting department offering undergraduate courses in health and physical activities) to the new degree-granting School of Applied Physiology. Also in 2002, the MSPO program became the first graduate degree program of the School of Applied Physiology. In 2004, the MSPO program was awarded a 5-year initial accreditation by the Commission on Accreditation of Allied Health Science Programs (CAAHEP) upon the recommendation by the National Commission on Orthotic and Prosthetic Education (NCOPE) and has since graduated classes each spring. (CAAHEP and NCOPE serve as the accrediting bodies for all schools in orthotics and prosthetics in the United States). As such, the MSPO program at Georgia Tech became the first CAAHEP accredited entry level master’s degree program in orthotics and prosthetics. The MSPO program was awarded re-accreditation by CAAHEP and NCOPE in the spring of 2010 and the reaccreditation will be effective for the maximum five year period (until 2015) when at such time another reaccreditation assessment cycle will be instituted.

**Linking Science and Clinical Practice**

In 2005, the Georgia Board of Regents approved the school of Applied Physiology to offer a PhD program in Applied Physiology and its first class of students matriculated in the academic doctoral program. New classes of PhD students have entered that program each year since 2005. Based upon the strengths of the MSPO and PhD program in Applied Physiology, the National Institute of Health (NIH) awarded the School of Applied Physiology a T-32 pre-doctoral institutional training grant in 2008. This grant provides five years of funding toward an academic PhD program in Applied Physiology dedicated to students pursuing research and academic careers in Prosthetics and Orthotics. Thus, the PhD program in Applied Physiology with focus in Prosthetics and Orthotics became the first NIH supported academic doctoral program of the P&O profession. Together the MSPO program, PhD program in Applied Physiology and PhD program in Applied Physiology with focus in Prosthetics and Orthotics collaborate to form an interdisciplinary synergy of education and research efforts within the School of Applied Physiology with a goal of bridging the gap of translational research between the laboratory and clinical practice arenas. The collaborations between the MSPO program and PhD programs is an important aspect of the culture within the School of Biological Sciences for this establishes the environment for the integration of research and clinical practice in the MSPO program.
DESCRIPTION OF THE MSPO EDUCATION PROGRAM

The MSPO program is designed to prepare individuals to be leaders in the field utilizing science as the framework for problem solving. The two-year full time applied science curriculum combines clinically oriented coursework in rehabilitation medicine, allied health science, and prosthetics/orthotics with engineering. The MSPO program is administered through the School of Biological Sciences as an interdisciplinary graduate program, collaborating with the Georgia Tech-Emory University School of Biomedical Engineering, Emory University School of Medicine, the Atlanta Veterans Administration and Atlanta metropolitan area hospitals, medical centers and orthotics/prosthetics health care facilities.

Student Enrollment
The Georgia Tech MSPO program recruits students who possess leadership potential, high analytical aptitude, good communication skills, self-motivation, and have a strong interest in science and medicine. The program seeks individuals with the desire to help others and to develop a constructive and influential role in P&O.

The fall semester of 2002 was the inaugural academic year for the Georgia Tech School of Applied Physiology and the MSPO program. That year, the MSPO program enrolled five individuals to begin its first class. Since that time, the program has graduated 99 students. We expanded the enrollment to 14 students beginning in the fall of 2013. Previous classes had been capped at 10 students.

Curriculum Themes
The MSPO education program curriculum consists of 48 credit hours over four semesters and covers three themes: 1.) applied physiology and engineering; 2.) clinical medicine and prosthetics/orthotics; and 3.) applied professional medicine and science.

Theme 1: Applied Physiology and Engineering (9 credit hours)
- Clinical Pathology
- Clinical Gait Analysis in P&O
- CAD/CAM in the P&O Laboratory
- Assistive Technology

Theme 2: Clinical Medicine and Prosthetics & Orthotics (36 credit hours)
- Introduction to P&O Processes and Clinical Methods
- Introduction to Prosthetics
- Lower Limb Orthotics I
- Lower Limb Orthotics II
- Trans Tibial Prosthetics
- Trans Femoral Prosthetics
- Upper Limb Orthotics
- Upper Limb Prosthetics
- Spinal Orthotics
- Augmented Clinical Practica in Medicine, P&O and Pedorthics

Theme 3: Applied Science and Research (5 credit hours)
- Special Topics (Three Research Seminars)
- Brown Bag Research Seminars
- A Capstone Research Project

Total = 48 Credit Hours
The first two themes, Applied Physiology and Engineering; and Clinical Medicine and Prosthetics/Orthotics, are synchronized so that the content of each course is related to applied clinical situations. Students will develop a framework for problem solving throughout these didactic, laboratory and clinical practica courses. The medical and prosthetics and orthotics courses emphasize rehabilitation medicine in which students learn patient examination and diagnostic principles through didactic coursework, laboratories, and clinical rotations under the guidance of physician specialists and other allied health science professionals (i.e., physical therapists, orthotists/prosthetists, etc.). Problem solving strategies for a variety of patient management and technical device design and fabrication projects are emphasized. The synchronization and depth of clinical content, engineering coursework, science, and problem solving strategies are taught at an advanced level not currently available in most prosthetics and orthotics educational programs.

The third theme, Applied Science and Research, expands the student’s knowledge of medicine and health care and increases the student’s awareness of research methods through the design and completion of a capstone research experience. This important part of the curriculum allows the student to formulate (with guidance) a research question and develop the research design to provide the necessary data to address the research question(s). This provides important skills and knowledge for the student prosthetist and orthotist to apply these research principles to a profession in need of an expanded scientific knowledge base.

Figuratively, each of the three curricular themes is represented by a three interconnected circles overlapping at a centralized area or focal point (FP) (Figure 1). From educational pedagogy perspective, this curricular focal point is created by introducing students to a consistent set of patient care scenarios throughout the MSPO program. In this approach to learning, students apply their knowledge of science, engineering, medicine, and technical skills to develop strategies to solve patient care vignettes based on “real world” problems. The purpose of consistently introducing real world problems throughout the curriculum is to challenge students to develop rational solutions, to “think outside of the box” and to utilize science as a framework for problem solving. As students progress through the curriculum, they encounter more complicated and challenging problems which subsequently develop their repertoire of knowledge and skills. Aspects of the clinical case vignettes consistently appear within each course, allowing students to investigate the patient-oriented problems and to develop solutions from a variety of approaches. Ultimately, this new curricular design
encourages students to adopt a well-rounded, evidence-based and organized plan of problem solving in addition to an appreciation for lifelong learning.

**Educational Mission**
The evolving mission of the Georgia Tech MSPO program is to produce graduates with advanced training and education in clinical practice and research; and to develop problem solving skills for lifelong learning to lead the prosthetics and orthotics profession in the new millennium.

**Educational Aims/Objectives**
There are three evolving aims and objectives of the Georgia Tech MSPO program:
1.) To provide the student with clinical problem solving skills for lifelong learning combined with biomedical engineering education.
2.) To improve prosthetic and orthotic care in the treatment of the physically challenged in the rehabilitation setting.
3.) To conduct investigations emphasizing good science to expand the body of knowledge in prosthetics and orthotics.

**Educational Philosophy**
Similar to a medical education model, the Georgia Tech MSPO program’s approach to prosthetic and orthotic patient rehabilitation management is founded upon organized problem solving and investigative processes within an interdisciplinary environment. It is through the interdisciplinary environment that student perspectives on the role of the health care provider, scientist, engineer, and medical specialist is enriched.

**Mode of Teaching/Learning**
The curriculum of the Georgia Tech MSPO program is taught through a variety of methods. The majority of the curriculum involves traditional lecture and laboratory courses in health sciences, medicine, engineering and prosthetics and orthotics. Additional learning experiences are taught on line via web based approaches. All core courses are supplemented by unique modular supervised clinical practica in which students rotate through local hospitals, medical clinics, and prosthetics and orthotics health care facilities under the guidance of a credentialed preceptor. The student initially observes and later participates in actual patient care, wearable technology design and creation. This approach is similar to established and emerging medical school teaching models. These applied learning experiences occur in parallel to hands-on patient physical examination, treatment planning and orthosis/prosthesis/wearable technology design and fabrication. Students perform these tasks both off-site in affiliated medical and orthotic/prosthetic facilities as well as on-campus in Georgia Tech’s world-class clinical and fabrication facilities including on-campus research laboratories. The three evolving curricular themes are synchronized throughout the MSPO program, linking each course with a consistent template for organized applied learning.

Laboratories in biomechanics, clinical gait and movement analysis, materials science, diagnostic imaging, prosthetic/orthotic wearable technology design/fabrication and clinical service all augment the traditional lecture and seminar courses. Students and faculty participate in a variety of investigations designed to enhance the student’s learning within an environment where problem solving techniques, inherent in good science, are emphasized. It is through these in-depth and varied science-based experiences that students develop the key elements that distinguish the master’s level of education.

The use of multiple research labs to augment traditional lecture courses enhances learning by creating an environment where students apply knowledge and theory learned in didactic courses to a variety of settings while emphasizing the scientific method. These experiences are conducted under the supervision of experts in science, technology, medicine, health care and P&O. This approach enhances the program’s research mission by providing an avenue for the assessment of existing knowledge in P&O and the development of new knowledge.
Role of the Fabrication and Design Supervisor within the MSPO Program

The Fabrication and Design Supervisor within the Master of Science in Prosthetics and Orthotics (MSPO) Program works in collaboration with the MSPO faculty to ensure the learning goals and objectives for the seven core clinical courses* of the MSPO curriculum are achieved. The primary responsibility of the individual is to instruct and guide students to achieve appropriate and safe prosthesis and orthosis design, fabrication and function commensurate with expectations detailed in the course syllabi. The Fabrication and Design Supervisor coordinates laboratory operations, in collaboration with the faculty, to ensure a safe and effective learning environment is maintained. Overseeing the management of the many different laboratory spaces to deliver the seven course clinical courses* demands a coordinated effort by the faculty and students and therefore the responsibilities related to lab maintenance and cleanliness are incorporated into the course syllabi, expectations and schedules.

*Seven core clinical courses of the MSPO program are:
Lower Limb Orthotics I, Lower Limb Orthotic II, Upper Limb Orthotics, Spinal Orthotics, Transtibial Prosthetics, Transfemoral Prosthetics, Upper Limb Prosthetics

MSPO CURRICULUM

Currently, the Master of Science in Prosthetics and Orthotics (MSPO) education program is a 48 credit hour program of study. The entry-level clinical master's degree program has an established, lock step curriculum. There are plans in the near future to increase the credit hour allocation to a program total of 66 credit hours in the program of study.

Sequence of the Curriculum

The MSPO curriculum is a sequence of interwoven clinical, didactic and research courses as well as clinical and research laboratory experiences. In addition to exposure to concepts and theories, students learn clinical techniques and technical design and fabrication skills in the laboratory portion of a number of courses. Courses and experiences are sequenced according to an approach where essential concepts are taught first followed by topics of greater depth and breadth. If a student does not successfully complete a basic course, they may not enroll in the advanced course until the basic course has been successfully completed. This means if a student does not successfully complete one of the core courses, they will have to wait a year until that course is offered again and then pass that basic course before continuing on with the more advanced courses.

Clinical practicum experiences occur each semester of the curriculum according to predetermined schedules that are created by the coordinator of the clinical practicum. Research courses and experiences begin in the second semester and occur each subsequent semester of the curriculum. No formal research course is taught in the first semester of the curriculum and instead students are immersed in an initial applied research experience (problem based learning project) as part of the course, APHP 6202 Clinical Gait Analysis. At the end of the first semester, students decide and commit to a line of research they will explore under the guidance of a faculty member.

All semesters of the MSPO program contain prosthetics and orthotics courses that are sequenced according to an anatomical and clinical systems pathology format. For example, during semester 1, students are introduced to basic prosthetic concepts for the lower extremity as well as lower extremity orthotics. Semester 2 involves both orthotics and prosthetics courses that address assessment and management of the lower limb(s) and common clinical systems pathological conditions that require P&O care. Semester 3 involves a continuation of lower limb prosthetics (TF) and spinal orthotics is presented. During this semester, greater complexity of clinical systems pathology is presented. Students continue to immerse in their capstone research during this time. In the fourth and final semester, the upper limb theme is employed where students learn assessment and treatment of persons with clinical systems pathology of the upper limb(s) in both prosthetics and orthotics. During this final semester, students are granted a greater portion of release time to allow completion and presentation of the capstone research and to secure a post-graduate residency position.
During the intervening summer session (May to August) there are no formal classes scheduled. This period allows students to continue to address clinical practicum hours as well as to begin additional work toward their capstone research. In order to allow the student to identify their priorities over this term, each student meets with a faculty mentor prior to the conclusion of the spring semester (semester 2). At this meeting, the student and faculty member develop an agreement as to the student’s plan of addressing a portion of clinical practicum hours and to begin efforts toward the student’s research. This is an important time for the student as there is no distraction of coursework so that the student can dedicate efforts to address clinical practicum and capstone research requirements.

For second year students, the orientation week (just prior to beginning the 3rd semester) contains annual training required by the Institute as well as sessions introducing residency searching and career planning. Orientation attendance is required for second year MSPO students on the Wednesday before classes begin.

The MSPO program encourages all students to attend the state and national meetings that usually occur throughout their time as students time permitting. The course curriculum is adjusted so classes are not offered during dates of American Academy of Orthotists and Prosthetists National Meeting and Georgia Society of Orthotists and Prosthetists annual meetings when possible. At these meetings, students network with their future colleagues and often canvas or interview for residency positions.

In the beginning of the fourth semester, students attend an MSPO sponsored residency workshop in order to help them prepare for identifying and securing a residency position. At this event, students learn about the important milestones for completing forms and related paperwork required for submission and processing to the National Commission on Orthotic and Prosthetic Education (NCOPE) prior to beginning an accredited residency. In addition, students have the opportunity to hone their interviewing skills and to learn more about residency opportunities via interviews with a number of residency site representatives.

**MSPO Credit Sheet**

The MSPO Credit Sheet on page 13 outlines the required MSPO course work. You should update your Credit Sheet each semester by recording each final course grade and checking off the courses as you successfully complete them. It is your responsibility to monitor your own progress toward your degree.

All core courses must be taken on a letter grade basis except the clinical practica (APPH 6999A-D), Clinical Pathology (APPH 6209), Assistive Technology (APPH 6997), Research Seminar I and II (APPH 8009 and APPH 8010) courses that are offered as Pass/Fail (Satisfactory/Unsatisfactory).
GEORGIA INSTITUTE OF TECHNOLOGY  
MASTER OF SCIENCE IN PROSTHETICS AND ORTHOTICS  
Credit Sheet

Name ___________________________  Student ID ___________________________

Prerequisites
- Biology (including laboratory)
- Chemistry (including laboratory)
- Human Anatomy
- Human Physiology
- Physics (calculus-based, including laboratory)
- Psychology (Introductory or General)
- Psychology (Abnormal or Human Growth & Development)
- Statistics

First Year Required Courses

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<th>Credit Hours</th>
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<tr>
<td>Fall Semester:</td>
<td>APPH 6202 (Clinical Gait Analysis)</td>
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<td></td>
<td>APPH 6209 (Clinical Pathology)</td>
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<td></td>
<td>APPH 6895 (Lower Limb Orthotics I)</td>
<td>(3)</td>
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<td>APPH 6971 (P&amp;O Processes/Methods)</td>
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<td>APPH 6975 (Intro to Prosthetics)</td>
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<td></td>
<td>APPH 6999A (Clinical Practicum in P&amp;O)</td>
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<tr>
<td>Spring Semester:</td>
<td>APPH 6223 (CAD/CAM in P&amp;O Laboratory)</td>
<td>(1)</td>
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<td></td>
<td>APPH 6896 (Lower Limb Orthotics II)</td>
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<td></td>
<td>APPH 6984 (Transfemoral Prosthetics)</td>
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<td></td>
<td>APPH 6999B (Clinical Practicum in P&amp;O)</td>
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<td></td>
<td>APPH 8009 (Research Seminar I)</td>
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Second Year Required Courses

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<td>APPH 6985 (Transfemoral Prosthetics)</td>
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<td></td>
<td>APPH 6997 (Assistive Technology)</td>
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<td>APPH 6999C (Clinical Practicum in P&amp;O)</td>
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<td></td>
<td>APPH 8010 (Research Seminar II)</td>
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<td>Spring Semester:</td>
<td>APPH 6981 (Upper Limb Prosthetics)</td>
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<td>APPH 6983 (Upper Limb Orthotics)</td>
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<tr>
<td></td>
<td>APPH 6999D (Clinical Practicum in P&amp;O)</td>
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<tr>
<td></td>
<td>APPH 8012 (Research Seminar III)</td>
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Total Hours 48 hours
CORE COURSE DESCRIPTIONS

APPH 6202 Clinical Gait Analysis: This lecture and laboratory class provides analysis of normal and pathological human locomotion. It includes the study of theory and instrumentation for measurement of temporal and spatial kinematics and kinetics, electromyography, and plantar pressure.

APPH 6209 Clinical Pathology: This lecture course offers a systems level overview of human pathology with emphasis on the effect of disease and disease processes on human movement and neuromuscular function relative to the need for orthotic and/or prosthetic rehabilitation.

APPH 6223 CAD/CAM in Prosthetics and Orthotics: This lecture and laboratory course provides theoretical and practical applications of computer aided design and manufacturing to prosthetics and orthotics. It includes methods of shape acquisition, model rectification and multiple manufacturing processes.

APPH 6895 Lower Limb Orthotics I: This course involves the evaluation, measurement, design, fabrication, fitting, alignment and rectification of custom and pre-formed orthoses to the lower limb involving the ankle and foot of human models. These orthoses include a variety of foot orthoses (FO), ankle foot orthoses (AFO) and other designs.

APPH 6896 Lower Limb Orthotics II: This course involves the evaluation, measurement, design, fabrication, fitting, alignment and rectification of custom and pre-formed orthoses to the lower limb involving the pelvis, hip, knee, ankle and foot of human models. These orthoses include ankle foot orthoses (AFO), knee orthoses (KO), knee ankle foot orthoses (KAFO), and/or hip knee ankle foot orthoses (HKAFO) and other designs.

APPH 6971 Introduction to P&O Processes and Clinical Methods: This course introduces basic processes for fabrication of prostheses and orthoses. Clinical methods associated with the provision of prostheses and orthoses will also be introduced.

APPH 6975 Introduction to Prosthetics: This course introduces the history of prosthetics (artificial limbs) and utilizes an evolutionary approach to expose the students to the different socket designs, materials, interfaces, suspension and components used in creating contemporary prostheses for persons with limb loss.

APPH 6981 Upper Limb Prosthetics: This course involves the evaluation, measurement, design, fabrication, fitting, alignment and rectification of custom upper limb prostheses to human models who have sustained limb loss from the fingertip to the entire shoulder girdle. These prostheses include finger, partial hand, wrist disarticulation, transradial, elbow disarticulation, transhumeral & shoulder disarticulation utilizing a variety of control mechanisms and fabricated in a wide array of designs.

APPH 6982 Spinal Orthotics: This course involves the evaluation, measurement, design, fabrication, fitting, alignment and rectification of custom and pre-formed orthoses to the spine involving the cervical, thoracic, lumbar and sacral regions and the cranial of human and simulated human models. These orthoses include a variety of metal and thermoplastic spinal and cranial orthoses.

APPH 6983 Upper Limb Orthotics: This course involves the evaluation, measurement, design, fabrication, fitting, alignment and rectification of custom endoskeletal lower limb prostheses to human models who have sustained limb loss from the fingertip to the entire shoulder girdle. These orthoses include a variety of metal/composite frame and thermoplastic upper limb orthoses including the finger orthoses (FO), hand orthoses (HO), wrist hand orthoses (WHO), elbow orthoses (EO), elbow wrist hand orthoses (EWHO) shoulder orthoses (SO) and shoulder elbow wrist hand orthoses (SEWHO).
sustained limb loss at the transtibial, Syme’s or partial foot level. These prostheses include a variety of thermoplastic and thermoset designs including varied feet, liners and suspension mechanisms.

**APPH 6985 Transfemoral Prosthetics:** This course involves the evaluation, measurement, design, fabrication, fitting; alignment and rectification of custom endoskeletal lower limb prostheses to human models who possess limb loss at the transfemoral, knee disarticulation and hip disarticulation levels. These prostheses include a variety of thermoplastic and thermoset designs including prosthetic knee units, socket designs and suspension mechanisms.

**APPH 6997 Assistive Technology:** Theories and devices associated with assistive technology and mobility aids, emphasizing topics important to clinical practice in prosthetics and orthotics.

**APPH 6999 A – D Clinical Practicum:** Students in the Georgia Tech Master of Science in Prosthetics and Orthotics (MSPO) program participate in unique supervised clinical patient management and technical fabrication experiences within health care facilities ranging from hospital settings to private practice settings.

The main goal of the clinical practicum is to provide an optimal educational experience for students in the MSPO education program by providing “real world” exposure to prosthetic and orthotic clinical practice as well as medicine in general. The focus of this introductory experience is to equip students with knowledge, skill, attitudes and behaviors required for all prosthetists/orthotists. The clinical practicum experience is divided into four courses. These courses also serve to meet the CAAHEP requirement of 500 clinical hours required for graduation.

By the end of a clinical practicum, the MSPO student will develop a base knowledge of multiple medical/clinical specialties (i.e. podiatry, vascular, neurology, etc.) that is relevant to prosthetic/orthotic clinical practice. Students will also complete a variety of clinical practicum within all essential areas of prosthetics (lower and upper limb) and orthotics (spinal, upper and lower limb). Through these guided experiences students will acquire basic clinical knowledge, clinical skills & technical competencies, and professional behaviors needed to evaluate and treat patients requiring prosthetic/orthotic care.

Through each clinical practicum, MSPO students will be guided and supervised by a diversity of Preceptors/Mentors from a variety of institutions who are board certified physicians, surgeons, biomedical engineers, prosthetists, orthotists, prosthetic/orthotic fabrication technicians, therapists and other allied health science professionals.

**Clinical Affiliations**
An essential component of any P&O curriculum is the required 500 hours of clinical experience. These hours must be completed at facilities which have a formal clinical affiliation with the MSPO Program. The clinical affiliations for the MSPO program are exceptional and we are continually expanding the number of affiliation sites in order to increase the scope of experiences for our students locally, nationally and internationally.

There are multiple clinical affiliation sites in and around the greater Atlanta area. These rotation sites are utilized throughout the time that the students are taking courses in Atlanta. One of these sites, the Veterans Administration Medical Center of Atlanta, houses numerous rotation opportunities including P&O, physical therapy, podiatry, vascular medicine, dermatology, physical medicine and rehabilitation and orthopedics. Students rotate through these non P&O rotations in order to grasp an understanding of medicine, the perspective of referral sources and the experiences their future patients will have had.

In addition to the local clinical affiliates, as of August, 2017 there are approximately 50 clinical affiliation sites across the country. These sites have been established to enrich the students’ opportunities beyond the Atlanta metro area in the event they are going to spend part of their summer or breaks in places other than Atlanta.
Lastly, the MSPO program as of 2008 has established three international clinical affiliations so that students can obtain valuable clinical experience outside of the United States while still being supervised by appropriately credentialed U.S. practitioners.

**APPH 8009, 8010 & 8012 Research Seminar:** This sequential three semester seminar series prepares the MSPO student for their capstone research experience. It includes introduction to research methods as well as the researchers that will serve as the research mentors for the capstone projects. Topics such as literature in P&O, literature reviews, research methodology, hypothesis generation, statistics, literature critique, poster presentations and verbal research presentation skills are addressed in this seminar series.
FACULTY

As a whole, the faculty represent a diverse and varied group of individuals that represent the interdisciplinary nature of the MSPO curriculum. There are three types of faculty in the program – individuals who are Georgia Tech faculty and who have full time appointments in the MSPO program, Georgia Tech faculty who have part time appointments in the MSPO program and visiting instructional faculty who teach in the MSPO program for specific topics or workshops. The exception to part time appointments is the adjunct faculty. Visiting instructional faculty in the MSPO program hold full time positions outside of the program in clinical practice, industry or other areas. Visiting instructional faculty represent a number of professions such as: prosthetics, orthotics, pedorthics, physical therapy, occupational therapy, medicine (orthopedics, rehabilitation, dermatology, vascular medicine, and podiatry), biomechanics and biomedical engineering.

Full Time Faculty

Géza F. Kogler, PhD, CO: Director, MSPO Program, Research Scientist II

Christopher Hovorka, PhD, MS, CPO, LPO, FAAOP, Research Scientist II

W. Lee Childers PhD, MSPO, CP, Senior Lecture

Chris Fink, MSPO, CPO, LPO, Lecturer

Part Time Faculty

Jodan Garcia, PT,DPT, OCS: Clinical Assistant Professor at the Georgia State University DPT Program. Jodan provides lectures in the APPH 6971 Intro to P&O Processes and Clinical Methods course.

Young-Hui Chang, PhD: Director, Neuromechanics Lab, Assistant Professor with a full time appointment in the School of Biological Sciences. In the MSPO program Dr. Chang has a part time appointment serving as instructor of APPH 6202 Clinical Gait Analysis as well as a research mentor for students pursuing research in comparative neuromechanics and biomechanics of walking and running type movements. Dr. Chang also is a member of the MSPO admissions committee.

Boris Prilutsky, PhD: Director, Biomechanics Lab, Associate Professor with a full time appointment in the School of Biological Sciences. In the MSPO program, Dr. Prilutsky has a part time appointment serving as instructor of APPH 6203 Biomechanics/Kinesiology as well as a research mentor for students pursuing research in biomechanics of movement of upper limb and locomotion.

Teresa Snow, PhD: Academic Professional, School of Biological Sciences. In the MSPO program, Dr. Snow serves as the instructor of the statistics content in the Research Seminar I, II and III courses (APPH 8009, APPH 8010, APPH 8012). She also serves as an advisor to the MSPO and PhD students offering assessment and guidance regarding their research.
### Visiting Faculty

In order to enrich the content provided in the curriculum, the MSPO program recruits visiting clinical faculty to lecture on specific specialty areas. There are approximately 50 guest instructional faculty in the Georgia Tech MSPO Program. These individuals (from the Atlanta metropolitan area, state of Georgia as well as areas outside the state of Georgia) represent an interdisciplinary cross-section of experts in a variety of disciplines such as medicine, prosthetics and orthotics, physical therapy, occupational therapy, biomechanics and CAD CAM.

The following visiting clinical faculty are engaged in teaching in the course, APPH 6209 Clinical Pathology, and/or they are clinical preceptors during student clinical rotations as part of the course APPH 6999A Clinical Methods/Clinical Practicum and/or they are engaged in teaching in the O&P Clinical Courses.

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Title/Licenses</th>
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</thead>
<tbody>
<tr>
<td>Daniel Acker, OTR/L</td>
<td>Lisa Bernstein, MD</td>
</tr>
<tr>
<td>Diane Atkins, OTR/L</td>
<td>Ross Bremer, CPO, LPO</td>
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<tr>
<td>Karl Barner, CPO, LPO</td>
<td>Susan Calloway, PT</td>
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<tr>
<td>Gary Bedard, CO, FAAOP</td>
<td>Robin Deandrade, MD</td>
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<tr>
<td>Karl Buter, BOCO</td>
<td>Brian Giavedoni, MBA, CP, LP</td>
</tr>
<tr>
<td>Kevin Carroll, CPO, FAAOP</td>
<td>William Holbrook, CP, LP</td>
</tr>
<tr>
<td>Colleen Coulter O’Berry, PhD, DPT</td>
<td>Marc Kaufmann, CPO, LPO</td>
</tr>
<tr>
<td>Laura DeLong, MD</td>
<td>KM Venkat Narayan, MD, MSc, MBA, FRCP</td>
</tr>
<tr>
<td>Amparo Gonzalez, RN, BSN, CDE</td>
<td>Wells Petras, MA, LPC</td>
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<tr>
<td>Matthew Hortman</td>
<td>Bob Radocy, MS</td>
</tr>
<tr>
<td>Paula Katz, CPO, LPO</td>
<td>Nathan Schwartz, DPM</td>
</tr>
<tr>
<td>Janet Lombardo, MBA, CPO, LPO</td>
<td>Stephen Schulte, CP, LP</td>
</tr>
<tr>
<td>Carol Miller, PhD, PT, GCS</td>
<td>Russell (Rusty) Walker, CP, LP</td>
</tr>
<tr>
<td>Matthew Nelson, CPO, LPO</td>
<td>Linda Worth, PA</td>
</tr>
<tr>
<td>Paul Prusakowski, CPO, LPO, FAAOP</td>
<td>Daniel Zenas, CP, LP</td>
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<td>Atef Salam, MD</td>
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<tr>
<td>Michelle Davis-Watts, PA</td>
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<tr>
<td>Sean Zeller, MSPO, CO</td>
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</tbody>
</table>

### Staff

The MSPO Program has a diverse and experienced staff with expertise in a variety of areas such as Laboratory, Computer Support and Clerical Support.

Scott French, CPOA, CTO: Senior Prosthetic and Orthotic Fabrication Laboratory Coordinator. Mr. French has a full time staff position in the MSPO program and serves as the lead fabrication technician for all orthotics and prosthetics core clinical courses (see curriculum for core clinical course descriptions).

Guay-haur Shue, PhD: Dr. Shue is a full time staff member in the School of Biological Sciences. He does not have a specific appointment in the MSPO program however his skills are available as needed for computer support.

Adrienne Durham, Academic Program Coordinator, and Adrienne Williams, Faculty Support Coordinator. These individuals serve as full-time staff in the School of Biological Sciences and without their ongoing support, the program would surely be less than it is. They each devote a portion of their duties to the MSPO program.
SCHOOL OF BIOLOGICAL SCIENCES FACILITIES

All buildings associated with the MSPO Program are ADA compliant. The facility for the MSPO program is located 1 mile north of main campus at 555 14th Street.

The **P&O Clinical Room** (Room 1302) (~795 sq. ft.) is equipped with 6 curtained patient exam areas that are each equipped with a large bed-size examination table, an exam stool, and a side chair. The room has two sinks with plaster traps and Formica® countertops and, storage cabinets, portable and adjustable height parallel bar sets, projector, screen, and white board.

The **P&O Plaster Room** (Room 1524) (~748 sq. ft.) has 18 work stations, each with pipe vises and storage cabinets, two large sinks with chemical resistant countertops and plaster traps, two large sand boxes, and a dust collection system.

The **P&O Fabrication Room** (Room 1536) (~1,034 sq. ft.) has 14 wooden work laboratory benches 11 equipped with a vice and air line, a sink with chemical resistant countertop and storage cabinets.

The **P&O Thermoforming Room** (Room 1542) (~752 sq. ft.) is dedicated specifically for high temperature sheet plastic thermoforming. The lab has four vertical/horizontal thermoforming stations with vacuum, large convection oven, walk-in fume hood, a sink with chemical resistant countertops and plaster trap, large panel saw, storage cabinets.

The **P&O Machine Room** (Room 1538) (~704 sq. ft.) is immediately adjacent to the Assembly room and houses five finishing routers specifically designed for orthotic prosthetic use, a large multi-speed drill press, shoe finishing machine, large band saw, grinders, disc and belt sanders, dust collection system and specialized metal contouring fixtures for orthosis fabrication.

The **P&O Lamination Room** (Room 1522) (~629 sq. ft.) is dedicated entirely for composite lamination and gluing procedures. The lab has 12 work stations that have chemical resistant countertops and individual fume snorkels, vacuum lines, chemical storage cabinets, fume hood, with eyewash station and emergency shower. The lab also has a negative pressure ventilation set-up.

The **P&O Sewing Room** (Room 1520) (~170 sq. ft.) is adjacent to the Lamination and the Plaster modification labs devoted to custom strap assembly and construction with a commercial grade sewing machine and a commercial Adler shoe patch machine, and storage cabinets. (The sewing room is not pictured.)

The **Clinical Simulation Laboratory** (Room 1518) (~150 sq. ft.) is next to the fabrication and clinical laboratories and is set up as a typical clinical exam room. The room is used for clinical teaching simulations and examinations. Videos are taken of students interacting with patient models for evaluating and critiquing physical assessment skills and learning exercises.

The **Prosthetic Orthotic Technology Innovation Studio (POTIS)** (Room 1528) (~400 sq. ft.) is adjacent to the main fabrication laboratories and houses the computer-aided design and computer-aided manufacture equipment for 3D printing and scanning. The laboratory offers opportunities for students to engage with emerging technologies in the field. Students use POTIS resources in the Introduction to CAD CAM Course and for prototyping of test apparatus fixturing for their Capstone research projects.

The **MSPO Student Offices** (Room 1005) The MSPO graduate student offices are equipped with 28 cubicle workstations. Within this large office space the student area has a small kitchenette that houses a refrigerator, microwave, and men and women’s restrooms. Two slide projection screens are located in the room as well as community desktop computers and two printers. The room is adjacent to the doctoral student offices and a conference room.
**Doctoral Student Offices** (Room 1012) The doctoral student offices are adjacent to the MSPO graduate student offices. They are equipped with 24 cubicle workstations. Doctoral students share the kitchenette and bathrooms with the MSPO graduate students.

| Clinical Instruction Laboratory  
| (Room 1302) | Plaster Modification Laboratory  
| (Room 1524) | Assembly Laboratory  
| (Room 1536) |  

| Thermoforming Laboratory  
| (Room 1542) | The Machine Room  
| (Room 1538) | Lamination Laboratory  
| (Room 1522) |
**Didactic Teaching Rooms**

There are three main rooms designated for lecture sessions: a Lecture Hall (Room 1253) that seats 50; Seminar Room 1 (Room 1257) that seats 15-20 and Seminar Room 2 (Room 1271) which seats 12. Each of these rooms is equipped with white boards and either smart boards and/or projectors and screens. In addition to these rooms two conference rooms are also available for use that seat approximately 10 individuals. The Clinical Instruction Laboratory is also set-up with a ceiling mounted projector and a screen for lecture purposes. The rooms are centrally located down in the Applied Physiology section of 555 14th Street immediately adjacent to the administrative and faculty offices. There is another didactic room located in Center for Assistive Technology and Environmental Access (CATEA), which is 1000 square feet and is used for instruction.
Comparative Neuromechanics Laboratory (CNL) (Room 1405) (~672 sq. ft.) is directed by Dr. Young-Hui Chang (PI). One of several motion capture labs in the School of Biological Sciences, it has a Vicon motion analysis system (460 Datastation with 32 channels of A/D, 6 digital high-speed M2 cameras and Dell Optiplex workstation) and associated system hardware and software capable of 3-D human movement reconstruction up to 1000 frames per second. Two custom force platforms (AMTI BP610X1800-4K-27) are integrated to provide automated reconstruction and integration of ground reaction forces (GRF) and calculation of joint moments during human locomotion. A removable custom-built, split-belt treadmill is also integrated with these force platforms for recording of GRF during treadmill locomotion. 20 A/D channels are available for the simultaneous integration of a surface electrode telemetered EMG system (Noraxon). Safety handrails and harnesses are installed to ensure subject safety during treadmill locomotion.

The Small Animal Motion Analysis Station contains a custom high-speed x-ray video system for direct recording of skeletal movements in rodents and other small animals. X-ray images are captured at up to 500 Hz at full resolution (1280 x 1024). 1 Columbus Instruments rat treadmill with rear-mounted shock stimulus and 1 rat walkway (1.5m long) with integrated rat-sized force platform (AMTI HE6X6) are available. A NI PCI-6289 I/O board is installed in a dedicated computer to simultaneously record chronically implanted EMG and ground reaction forces during treadmill and over ground locomotion. The Research Preparation Station is dedicated to experimental preparation and includes workbenches, various tabletop and handheld machine tools for custom fabrication of research equipment, and a wet area including sink, dissection table and cooler/freezer for rat cadaver material.

Exercise Physiology Laboratory (Room 1506) The Exercise Physiology Laboratory within the School of Biological Sciences, Georgia Institute of Technology is well equipped to investigate several key areas of applied human and exercise physiology research. In 2002, a custom-built (Johnson Controls) environmental chamber ($75,000) was installed in the newly renovated (750 sq. ft.) laboratory space. The 12 x 9 x 8 ft climatic chamber is capable of maintaining ambient temperatures ranging from 60 to 100°F and relative humidity from 10 to 70%. Environmental conditions as well as subject’s core and skin temperature are measured with calibrated telethermometers interfaced to a personal computer. Metabolic rate, oxygen cost, respiratory exchange ratio can be determined using either a Parvo Medics Metabolic system (purchased in 2002) or a Sensor Medics 2900 Metabolic Cart. In 2008, two Viasys Vmax calorimeters were obtained to perform resting metabolic rate studies. The Laboratory has several cycle ergometers: two high performance electronically braked ergometers (Excalibur Sport, Lode, Netherlands), one electronically braked Sensor Medics Ergolyne ergometer, and three mechanically braked Monarch 190 ergometers. A custom-built Parker treadmill was purchased in 2003. It has a variable incline capability and a maximum speed of 15 mi/hr. In addition, the Laboratory is equipped with a Quinton EKG monitor/treadmill system and a Pacer treadmill. A computerized isometric testing device was custom-built to obtain maximal voluntary force in the knee extensor muscles.

Housed within the Laboratory is a body composition room featuring a Dual-Energy X-ray Absorptiometer - DEXA (GE Lunar Prodigy unit) for assessing bone mineral density and total body fatness. Body mass measurements are obtained using a Chatillon H81000 platform scale accurate within 0.05 kg. Additional measurement tools include standard laboratory calipers for measuring skinfold thicknesses and an anthropometric measurement kit for assessing body girths and skeletal widths.
The bench laboratory section includes general clinical chemistry spectrophotometric analyzers for electrolytes, glucose, lactate, hemoglobin, and various protein and enzymatic assays. A Nova-5 electrolyte analyzer was purchased in 2008 in order to measure within the range required to detect sweat sodium concentration. Total body water can be performed via infrared spectrophotometry and osmolality via a MicroOsmette osmometer.

Clinical Biomechanics Laboratory (Room 1308) (~924 sq. ft.) Biomechanics Laboratory is equipped with a treadmill, shoe plantar pressure measurement system, F-Scan® in-shoe measurement system, Bergmann® optical laser foot scanner, computers, chemical resistant counter tops, cabinets, freezer, several digital force gauges, tool chest, thermocouple, digital micrometers, selection of load cells, DVRT strain transducers, and an air compressor. In addition, adjacent room that houses an Instron® servo-hydraulic test machine (Model 8500) that is capable of both linear and torsional loading.

Cycling Motor Control Station: The Cycling Biomechanics Laboratory has of space and is equipped with a Lode programmable cycle ergometer fitted with custom made adjustable length crank arms, Custom pedal system instrumented with dual Kistler piezoelectric load cells, 14 Kistler amplifiers, a Peak Performance six-camera infrared motion capture system, 12-channel Noraxon surface EMG system, a Serotta fit-cycle adjustable cycle ergometer, Custom made device to passively measure motion between the residual limb and the prosthetic socket, Instrumented leg extension machine, 2 desk top computers, chemical resistant counter tops, cabinets, tables, sink, refrigerator, two treadmills, a Monarch cycle ergometer, and a tool chest.

Materials Testing (Room 1308A) An Instron material testing machine is housed in a dedicated 100 square foot located adjacent to the technical fabrication area of the facility. The Instron materials testing machine is capable of quantifying the engineering performance of a variety of materials in compression, tension, torsion and other loading parameters. This room contains all computer hardware and software needed to perform the desired tasks.

Necropsy Biomechanics Surgery Laboratory (Room 1421) (~400 sq. ft.) The Necropsy Biomechanics Surgery Laboratory is affiliated with several other Applied Physiology laboratories. The lab is dedicated to human cadaver and animal surgical and dissection procedures. The lab is equipped with a mobile floor model surgical lamp, stainless steel sink and counter tops, stainless steel surgical tables, freezer for tissue storage, and an array of orthopaedic surgical and dissection instruments. (not pictured)

Prosthetic and Orthotic Research Fabrication Room (Room 1326) (~416 sq. ft.) The research fabrication room is directly across the hall from the CBL and is dedicated for the fabrication and modification of orthotic and prosthetic devices. The PORFL is equipped with a sink, plaster trap, chemical resistant counter tops, fume hood, oven, chemical cabinets, and specialized tools for prosthetic and orthotic alignment and fabrication procedures.
The **AP Atrium** is a centrally located foyer adjacent to the Lecture Hall space, accented by natural light. This area is used for Biological Sciences academic and social gatherings.

The **MSPO Faculty Offices** are clustered on the east side of the building.

<table>
<thead>
<tr>
<th>Faculty/Staff</th>
<th>Room Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris Hovorka</td>
<td>1329A</td>
</tr>
<tr>
<td>Chris Fink</td>
<td>1329B</td>
</tr>
<tr>
<td>Scott French</td>
<td>1329C</td>
</tr>
<tr>
<td>Lee Childers</td>
<td>1329D</td>
</tr>
<tr>
<td>Geza Kogler</td>
<td>1329E</td>
</tr>
</tbody>
</table>

**555 14th Street Building Access**

Access to the facility at 555 14th Street must be done via Buzz card proximity sensors. If you do not have a Buzz card or it is misplaced, access can be granted through the west side building entrance (575 14th street) where a security guard is present 24 hours a day. Photo ID will be required. Students may access the building at any time. If you are going to come to the facility at late or “off” hours, it is strongly advised that you park your vehicle in the back (north side) of the building which is gated and has restricted Buzz card only access. You must have a valid Georgia Tech Parking Permit to park in the gated parking area.

**MSPO Facilities Access**

In order to maintain the rights and safety of students in various aspects of the educational program, the following policy has been adopted:

Students have the right to access and use program equipment for review and practice during business hours (Monday through Friday 9:00 a.m. – 5:00 p.m.) and by appointment during non-business hours (evenings and weekends). At NO TIME shall a student be in any of the laboratory spaces of the MSPO program alone. Rooms are scheduled for priority use. Scheduling access to the facilities or loans of MSPO equipment must be done through Scott French.

Laboratory areas must be locked at all times unless occupied by departmental students or personnel. During non-business hours (evenings/weekends) even occupied classrooms, labs, student offices, and corridor doors must be locked. The last person to leave any area is responsible for turning off all equipment, and for locking doors. Building, corridor, or room doors should not be propped open during non-business hours under any conditions.

Students are encouraged to utilize scheduled practice times arranged by each course instructor. During these scheduled hours, instructors or graduate assistants will be available to observe and answer questions.

With instructor approval, students may practice treatment and evaluative procedures that present little or no risk (e.g., range of motion, goniometry, postural assessments, etc.). Tests and procedures that may present more than minimal risk (i.e., electrical modalities, hand and power tools) require supervision by faculty or trained graduate assistants.

Facilities and equipment are not to be utilized for recreation, exercise training, or the treatment of students, friends or family members.

**Campus Phones**

Campus phones require dialing 9 for local outside line.
Security
The safety and security of students, personnel, guests, facilities and equipment are very important. In case of fire, medical emergency or any suspicious activity call the Campus Police at (404) 894-2500 from your cell phones or 4-2500 from any building phone.

Student mailboxes
MSPO student mailboxes are located in the open area adjacent to the Atrium. Your mail will rest on the shelf with your name. Students should check the contents of their box regularly for communication to the students from faculty or administrators. These boxes can also be used for group communication.

Facility & Equipment Student Responsibilities
Be proud of our facilities! It is required that all students maintain clean and orderly facilities and equipment. In order to help accomplish this:

a. return all materials/equipment to their proper storage locations;
b. food is not permitted in classrooms or labs. Students may have food/beverages in the Graduate Student Office, however, this room must remain clean at all times. Please dispose of all trash. The refrigerator must be cleaned out weekly.
c. food/beverages may be stored on a daily basis in the graduate student offices break room refrigerator.
d. any spills are to be cleaned up immediately, large spills are to be reported to the department office; and

e. office personnel, or related course instructors, are to be notified immediately if materials or equipment are malfunctioning or damaged.

Please respect the desire of fellow students, faculty and staff to work in an enjoyable and safe environment. Additional student responsibilities regarding the equipment and facility are presented every fall during the orientation/first week of class.

Maintenance/Janitorial Issues and Recycling
In regards to maintenance/janitorial issues, requests should be made in writing – send an email to Adrienne and copy Erica, this way they both know what has been requested.

In regards to janitorial, if you have a special request in addition to the normal day-to-day service, such as having your floor cleaned/mopped, again please email Adrienne with a copy to Erica.

Blue recycle bins have been placed in public areas of the building. You can put paper, cans, plastic bottles, cardboard or anything that can be recycled in them. NO FOOD. The bins are located by the student mailboxes outside of Room 1230; two on the main hall where most of the labs are located; and in the student break room in the MSPO student area.

Patient Models/Visitors
Patient Models/Visitors can no longer park in the west parking area (575 side of the building). GCMII has been given control over that lot. If patient models park there, they will be asked to move to the visitor lot. Please remember to give your patient models/visitors your phone/cell number in advance of their arrival.

Security
If you have any issues with security or would like to make any suggestions to make our workplace safer, please contact Adrienne Durham in room 1358.

Student Use of the School Copier
Students enrolled in the MSPO Program will be permitted to use the copy machine located in Room 1364 of the Administrative area in order to make one copy of materials on file in the School of Biological Sciences Office. This machine is not to be used for copying other non-departmental or other personal materials.

**Student Use of the School Poster Printer**

A poster printer is housed in the office of Dr. Guay-haur Shue in Room 1230. This printer is dedicated to printing posters for use in scientific presentations. Students should plan ahead when printing a document. All poster files (.ppt or .pdf) should be emailed to support@ap.gatech.edu for printing.

Instructions for Mac OS and Windows 7 will be posted at a later date.

**ON CAMPUS RESOURCES FOR MSPO STUDENTS**

**Price Gilbert Memorial Library**

During the semester and for the majority of the library, hours of operation are 24 hours a day, seven days a week (24/7). Hours vary between semesters and on holidays. Consult the library website at http://www.library.gatech.edu for more information.

MSPO students have access to a growing number of textbooks, DVDs, CD-ROM, videotapes and other learning resources through the library’s RESERVE. Any MSPO student may check out learning resources for a TWO HOUR period. Library Reserves is located on the 1st floor.

The On-line Information System includes the catalog and databases indexing periodicals, conference proceedings and other materials. It is accessible remotely through GTNET or through personal computers with telephone connections and a modem, as well as through terminals in the library. For additional information contact the Circulation & Reserve Department (404) 894-4500. Students may obtain materials that are not available in the library collection through the Interlibrary Loan Department (404) 894-8190. In addition, students may access the health science, biomedical science and other libraries of Georgia State University, Emory University, other universities within metropolitan Atlanta and the state of Georgia. To achieve lending privileges at these libraries, each MSPO student will need to acquire a library access card (free of charge) available at the Reference Department of the Library or by contacting Lori Critz, Life Sciences Librarian at (404) 385-4392 or e-mail at lori.critz@library.gatech.edu.

MSPO students also have access to a prosthetics and orthotics database, known as the Rehabilitation Engineering Cumulative Access Library (RECAL) Legacy. RECAL Legacy is a bibliographic database that houses the world’s largest collection of documents, textbooks, journals and other publications on prosthetics and orthotics from the early 1900’s to 2007. The database is housed at the University of Strathclyde in Glasgow, Scotland and internet access is available at cdlr.strath.ac.uk/recal

**Student Center**

All students may use the Student Center and take part in the many programs and activities coordinated through the Center’s organization. You may reach the Student Center home page at http://studentcenter.gatech.edu The building and its facilities are available for use by all members of the campus community. Campus organizations may schedule space for meetings, banquets and other special programs with no charge for the space. Complete catering is available ranging from light snacks and beverages to full course dinners. Calendars of events, building hours, notices of special activities, and other information are available at the information desk in the Student Center. Three full-service Automatic Teller Machines (ATMs), provided by Wells Fargo and Bank of America, are accessible on the first floor.

The Student Center’s ticket service, called Tick-A-Tech, makes discount tickets to entertainment events available to the Georgia Tech community. Tick-A-Tech handles most on-campus events and arranges off-campus discount opportunities. For further information about events available through Tick-A-Tech at the
Robert Ferst Center for the Arts ticket office or information on Student Center and campus programs, call the program information line (404) 894-9600.

**Georgia Tech Post Office**

Only students who live on campus get an on campus mailbox at the Student Center. Non-campus students may obtain one for $30/year by applying for a lottery. More information may be found at: https://studentcenter.gatech.edu/resources/po/Pages/default.aspx

## Academic Policies

### Georgia Tech Honor Code

Honesty is expected of all students in the MSPO program. The Georgia Tech Honor Code is intended to continuously remind students of the importance of honesty in their academic and professional lives. It also serves to create awareness on the part of both students and faculty of the rules regarding academic honesty and the processes to be followed when those rules are broken. In addition to the Honor Code and Honor Pledge students should be aware of the Rules for Student Conduct found in the Georgia Tech General Catalog. Of particular relevance are the rules that apply to academic misconduct. For additional information about the Honor Code and for a complete copy of the text go to the Georgia Tech On-Line Catalog at http://www.honor.gatech.edu/content/2/the-honor-code

### Honor Pledge

All students are required, when requested, to attach the following statement to any material turned in for a grade in any course in the MSPO program.

> “On my honor, I pledge that I have neither given nor received inappropriate aid in the preparation of this assignment.”

**Signature of Student_____________________________________

It is the responsibility of the faculty member teaching the course to make clear to the students at the beginning of the semester what is considered appropriate and what is not.

### Registration

All enrolled MSPO students should register for classes during the registration period which occurs near the end of the preceding semester. To register for classes, go to https://oscar.gatech.edu. If students have problems with registration, please contact Adrienne Durham.

#### Full-Time Graduate Student Status

To be considered a full-time graduate student, you must be registered for a minimum of 12 hours on a letter grade or Pass/Fail basis. This is an Institute policy for which no exceptions are allowed, even in the term of graduation.

The following categories of students must register for at least 12 hours:

- Graduate Research Assistants (GRA) and Graduate Teaching Assistants (GTA)
- Students supported by fellowships, traineeships, or individual grants
- Students assigned to the Institute by the Armed Forces for the purpose of pursuing a degree
- Students on Student Visas
- Graduate Co-op students on non-work terms

### Verification of Your Class Schedule

Use the student computer access system (https://oscar.gatech.edu) to insure that your official class schedule is the same as the set of classes in which you think you are enrolled, that the grade basis is appropriate for that
course (e.g., letter grade, pass/fail) and that you have registered for the correct number of hours. This is particularly important if you registered and did not print a copy of your schedule. During the third week of the semester you will receive a confirmation copy of your schedule in your Georgia Tech Post Office box. Take the time to check your schedule and make sure you are currently attending that set of classes. If there is a discrepancy you must take steps immediately to resolve any differences. Having a class on your official schedule that you did not attend will result in your receiving a failing grade “F” in that course unless you drop the class before the drop date at mid-term.

REQUIRED CERTIFICATIONS, DOCUMENTATIONS & INSURANCE FOR PROGRAM PARTICIPATION

CPR and First Aid
Georgia Tech MSPO students must provide proof of Adult, Infant and Child CPR and First Aid certification and the certification must be active throughout the duration of their enrollment in the MSPO education program. These courses are offered as a component of the new student orientation week. In the event you have an up to date CPR/First Aid training, you will not have to take it again during orientation week however, proof of current certification such as a photocopy of your certification card is required.

Health Immunization Screening/ Past Exposure
In accordance with the Centers for Disease Control and Prevention, students involved in clinical patient interaction are required to have the following immunizations and to provide documentation to the Georgia Tech Student Health Center:

- Hepatitis B
- Measles, Mumps, Rubella and Rubeola
- Tetanus
- Tuberculosis Screening (Every 12 months)

Contact Information for Georgia Tech Student Health Center

- Dr. Gregory R. Moore, Senior Director
- Stamps Health Services
- Phone: 404-894-1420
- Location: 740 Ferst Drive, next to Campus Recreation Center (CRC)
- Web: [http://www.health.gatech.edu](http://www.health.gatech.edu)
- Hours of Operation: Monday through Wednesday and Fridays 8:00 a.m. - 5:00 p.m., Thursday 9:00 a.m.-5:00 p.m. Summer hours are limited, check website for availability.

Insurance
a.) Professional Liability (Malpractice): Students involved in clinical education are required to be covered under the student professional liability and malpractice insurance. This policy covers students in the allied health science education programs like the MSPO Program. (The insurance carrier is Marsh Affinity Group and a group plan is provided for all MSPO students).

b.) Health Insurance: Students will be required to show documentation of personal health insurance coverage while participating in clinical education experiences. Georgia Tech offers a Graduate and Professional Student Accident and Sickness Insurance policy. A compilation of student health insurance policies is on file in the Graduate Student Office. The MSPO Program does not recommend or endorse any one insurance policy.

Other Professional Safety Training and Coverage

- Fire safety and chemical safety training (included in orientation)
- Accident and Safety Insurance (student responsibility)
TUITION & FEES

All tuition and fees are due at the time of registration. If tuition is not paid at the time of registration, your schedule of classes will be dropped by the Registrar's Office. A student with a graduate assistantship waives some out-of-state fees, if applicable, and pays reduced in-state tuition.

The approved tuition and fees for the MSPO education program may be accessed on the internet at: (http://www.bursar.gatech.edu/tuiandfee.php). In addition to the published tuition and fees, the MSPO education program has instituted program specific fees and expenses described below:

Orientation Fee
An orientation fee of $200 is charged to all incoming MSPO students to cover the costs associated with training and meals.

Program Fees
The Georgia Tech MSPO program institutes a $2,000.00 fee per semester for four semesters for a total of $8,000.00. The per semester fees cover the costs for materials required for the student to design, fabricate and alter the multitude of prostheses and orthoses required for student understanding. Fees also include maintenance for technical fabrication and clinical patient laboratories, costs for patient models and costs for specialized laboratory learning modules.

Explanation of Georgia Tech Student Fees
All of these fees are lowered to a prorated amount over the summer except the SIF. Most of this information is being taken from either below link:

Georgia Tech Bursar's office:
http://www.bursar.gatech.edu/student/tuition/Fall_2015/Fall15-all_fees.pdf

The Board of Regents for the USG:

The Special Institutional Fee (SIF, $544/semester) As many of you correctly guessed, this was established to help alleviate fiscal shortfalls from state budget cuts. It has grown from $100/semester to the current level in 5 years. While sunset dates have come and gone, it still remains. This fee goes to general expenses, meaning it is not earmarked for specific programs. As a result, I cannot cite examples of how this fee benefits us.

The Health Fee ($160/semester) This is used to support the general operation and staffing of Stamps Health Services. The paying of this fee “covers unlimited visits to the Primary Care Clinic and Women’s Clinics, some laboratory testing, psychiatry assessment and limited psychiatrist visits per semester, consultations with health educators and flu shots. Other services are significantly discounted.” This differs from the health insurance plan through BlueCross/BlueShield of Georgia, “which covers referrals, hospitalizations and other costs.”

The Athletic Fee ($127/semester) The revenue from the fee accounts for less than 10% of the total operational budget of the Athletic Association. This fee does allow students to receive tickets to events.

The Student Activity Fee ($123/semester) This is used to help financially support nearly any organization involving students. This is your “gym membership” to the CRC and helps support the general operation of the CRC and the Student Center, Student Publications, as well as an incredibly diverse set of student-led organizations. The Student Government Association administers this fee. Special to graduate students, this fee pays into the Graduate Conference Fund to provide travel funds for us to present research, as well as the planning and execution of the Georgia Tech Research and Innovation Conference and the Career Symposium.
The Technology Fee ($107/semester)  This fee goes towards the refreshing of technology on campus (from smart classrooms and projectors to standard computer rotations), including licensing fees for many software packages aimed at the education of all students.

The Transportation Fee ($81/semester)  This simply goes to pay the operations and contract costs associated with the Trolley, Stingers, Stingerettes, and Emory Shuttle.

The Recreation Facility Fee ($54/semester)  This is, likely, the most surprising. “This fee, first implemented in Fiscal 2001, helps cover the debt service payments on the newly renovated Campus Recreational Center. This fee is set for the full term of the Bonds that finance this facility.” This fee has nothing to do with your ability to use the CRC other than the fact that it pays the debt that was created to make the CRC what it is. It is set to be paid off in 2031.

Fabrication Laboratory and Clinical Tools
Fabrication lab and clinical tools will be provided to MSPO students. A Tool Check & Inventory will be performed at the end of each Spring Semester. It is the students’ responsibility to pay for the replacement of any tools that are lost, stolen, or damaged.

Textbooks
A list of textbooks for courses will be made available to you at the beginning of each semester. Copies of all required texts are also available in the library. In addition to online booksellers, books may be purchased at either:

Engineer’s Bookstore
Atlanta, GA 30318
Phone: 404-221-1669
FAX: 404-221-1110
Web site: www.engrbookstore.com

Barnes and Noble at Georgia Tech
48 5th Street, NW
Atlanta, GA 30308-0453
Phone: 404-894-2515
FAX: 404-894-2530
Web Site: http://gatech.bncollege.com/
ADVISING

Academic Advising
Each MSPO student is assigned a faculty advisor to assist with academic progress throughout their tenure in the MSPO Program. At the beginning of each academic year, a one-on-one meeting between each student and their respective advisor is required within the first two weeks of classes. The initial session will be used to discuss key academic policies and academic matters of interest to the student. This meeting will allow advisors and students to become better acquainted with each other and with specific needs or changes in the student’s life which might affect the academic setting. Many times personal situations impact academic performance. The MSPO faculty advisor will be able to direct students to services available on campus to assist with counseling, academic support, etc., as the need arises. Students are encouraged to make every effort to keep in touch with your advisor throughout the year.

Research Mentoring
Each MSPO student is assigned a research faculty mentor to guide the student in their research. Your research mentor will direct students as they navigate the research process. At the beginning of your time in the program, your academic advisor will be your research mentor. Once your capstone research project has been selected and the research mentor has been identified, if they are an MSPO faculty member they may become your academic advisor.

GRADING POLICIES

Grades Used to Compute Grade Point Average
A - excellent (four quality points)
B - good (three quality points)
C - satisfactory (two quality points)
D - unsatisfactory (one quality point) (course must be repeated if final grade for the core course is lower than a “C”)
F - failure, must be repeated if in a required course (no quality points)
Each individual course instructor is responsible for establishing and notifying students of the guidelines required to complete coursework. The School of Biological Sciences has set the following criteria for assignment of letter grading (percent of total coursework):

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Grade % of Total</th>
<th>MSPO Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
<td>superior performance</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89</td>
<td>suitably proficient performance</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79</td>
<td>marginal performance</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69</td>
<td>unsatisfactory performance</td>
</tr>
<tr>
<td>F</td>
<td>□ 60</td>
<td>unacceptable performance</td>
</tr>
</tbody>
</table>

Grades Not Used to Compute Grade Point Average
S - passing of a course taken under Pass/Fail or completion of a course in which no letter grade may be assigned;
U - unsatisfactory in a course taken under Pass/Fail or unsatisfactory performance in a course for which no letter grade may be assigned;
V - assigned when the course has been audited; no credit given; and implies no academic achievement on the part of the student;
W - indicates the student was permitted to withdraw without penalty;
Grades for courses taken at another institution are not computed in the Georgia Tech GPA. The hours of an equivalent course at Georgia Tech (usually 3 credit hours) are counted toward the degree, but the GPA is not affected.
Policy on Academic Warning, Probation and Dismissal

1. A minimum, cumulative grade point average of 2.7 (where an A = 4.0) is required to be maintained for all MSPO students.

2. Any student earning a grade point average of less than 2.7 during his/her first 12 hours of coursework shall be on academic warning for the following semester. Students earning less than a 2.7 grade point average on courses taken while on academic warning shall be placed on academic probation.

3. Students earning less than a 2.7 grade point average while on probation shall be dismissed from the MSPO education program.

4. Students receiving less than a 2.0 grade point semester average at any point shall be dismissed, regardless of their previous status.

5. MSPO students not having a cumulative grade point average of 2.7 or better after their second semester, and each subsequent semester, shall be dismissed.

6. Any MSPO student receiving two or more grades of D, F or U (in a pass/fail course) in any combination throughout the MSPO program, regardless of their GPA or standing in the program shall be dismissed from the MSPO program.

7. A student who is dismissed for unsatisfactory academic performance is not allowed to re-enter the MSPO education program for at least one year, other than the summer semester. He/she must submit an Application for Readmission and a Petition to the Faculty describing the reasons leading to dismissal and why he/she should be readmitted.

Scholastic Standing

Good Standing: The minimum satisfactory scholastic average is 2.7 for MSPO students.

Warning: A student who has an overall scholastic average below the minimum satisfactory scholarship requirement, or whose scholastic average for work taken during any semester is below this requirement, shall be placed on academic warning.

Probation: A student on academic warning whose scholastic average is below the minimum satisfactory scholarship requirement for any semester shall be placed on academic probation.

Dismissal for unsatisfactory scholarship: The Institute may drop from the rolls at any time a student whose record in scholarship is unsatisfactory. A graduate student whose scholastic average for any semester is 2.0 or below, may be placed on academic probation or dropped, regardless of the student’s previous record.

Removal of Deficiencies

Failing Grade: A student who receives a grade of “D or F” in a core course must plan to enroll in the course the next semester that it is offered, dependent upon enrollment availability.

Incomplete: A grade of “I” may be assigned when a student is unable to complete the requirements of a course for reasons beyond the student’s control. Legitimate bases for an “I” may include missing an exam because of illness, family death, jury duty, or other uncontrollable events. The student has the responsibility to notify the instructor as soon as the event is known. The student must satisfy the instructor as to the reasons for deserving an “I”. The “I” will be assigned only in rare instances and when the student is otherwise passing the course.
It is the responsibility of the student and professor to agree upon the work necessary to remove the incomplete grade. Students receiving an “I” must complete the work equivalent to that of students who completed the course during the semester.

The “I” must be removed by a change of grade form submitted by the instructor before the end of the student’s next semester in residence. Failure to remove the “I” by the end of the student’s next semester in residence results in an automatic grade of “F”. It is the responsibility of the professor assigning the “I” to submit a Change of Grade form to remove the incomplete grade. It is the student’s responsibility to check with Adrienne Durham in the School of Biological Sciences Office to be sure that the form has been submitted.

Registering and repeating a course in which an “I” grade has previously been assigned will not remove the “I”. Registering again for and repeating the course will result in the change of the “I” grade to an “F”.

Grading appeals
If a final course grade is believed to be in error, the student should contact the professor as soon as possible. In general, no change of grade will be made after the end of the student’s next semester in residence. If the student is not satisfied with the response from the professor, the MSPO Program Director should be contacted next to discuss the situation. Then the Chair of the School should be consulted. At that point other administrators may be contacted. If appropriate, the student may also wish to consult the Georgia Tech Student Affairs office and petition the grade change formally.

Institute Final Exam Policy
Generally, no exams (including final exams) are given during the last week of the semester (except to graduating students). This policy is in place to make sure that students have time to prepare for their exams and are not asked to take exams during the last week of the term when many other assignments are often due.

The final exam schedule for all MSPO classes will be posted near the end of each semester to confirm times and room assignments. As our program is somewhat self-contained, our finals schedule does not necessarily conform to the final exam posted on the OSCAR web site.

Dropping a Class
The final day a course may be dropped is the mid-point of the semester. The date of the last day to drop a course is listed on the OSCAR web site on the Five-Term Calendar (https://oscar.gatech.edu). Courses are dropped through the registration system (https://oscar.gatech.edu). If you have a hold on your record, you will need to clear the hold before you will be allowed to drop a course. To drop a course, you will use the same procedure you used to register for the class. From the Registration Menu, select the “Add/Drop Classes” option. The options available to you are shown when the arrow on the “ACTION” pull-down menu is clicked. The steps to follow are: (1) select “Course Drop by Student” from the pull-down menu; (2) click the “Submit Changes” button near the bottom of the page; (3) note that the Course Status field will then change from “Registered” to “Course Drop by Student”. You are responsible for dropping the course on-line before the mid-point of the semester. Copy the screen after withdrawing from a class so that you will have a record of the withdrawal and save it until the withdrawal appears on your end-of-semester grade report. There is no refund of fees for dropped courses. If you wish to withdraw completely from Georgia Tech, you must go through the registration system (https://oscar.gatech.edu).

MSPO students with GRA/GTAs who drop below the required 12 credit-hour weekly load may forfeit their assistantships and be required to pay the full tuition amount for the hours enrolled.

Transfer of Courses
Transfer credit for an MSPO core course will be considered for approval only if the class was completed prior to the student’s matriculation in the MSPO program. Other courses will be considered on a case by case basis.
Re-admission to the MSPO program

Students who voluntarily withdraw from the MSPO program or are not enrolled for two or more consecutive semesters must apply for readmission. Readmission forms may be obtained in the Graduate Studies and Research Office. The form should be submitted to the Director of Graduate Programs by the MSPO Application Deadline for the year of anticipated re-enrollment. A student is not automatically readmitted upon request. To be readmitted, the student must re-apply for admission and meet the admission standards of Georgia Tech and the MSPO program in effect at the time of readmission.

ATTENDANCE

Class participation is an integral part of the total learning experience of all MSPO courses. In these classes, absence for any reason, excused or otherwise, may result in a lower grade.

The MSPO program faculty regard class attendance as an important part of the MSPO classroom experience and strongly encourage students to avoid absences. As participants in a full-time program, students should realize that academics have priority. Although some students find it necessary to work part time, outside employment should be considered secondary to academics and should not interfere with class attendance. As the MSPO program is full time, absences due to work-related conflicts are not considered valid excuses. Students may be penalized for such absences.

MSPO Policy on Academic Absence

Active participation in the educational process is expected of students in the MSPO Program. Student comments, questions, and sharing of experiences are vital to the integrity of each class in a professional curriculum. Additionally, student colleagues develop interdependent relationships working together in the classroom, laboratory, clinic, and community.

Student absences from daily program activities are to be anticipated for very legitimate reasons (i.e., personal illness, family emergencies, hazardous travel conditions, etc.). Students who determine that it is necessary to miss a regularly scheduled MSPO Program class, laboratory, clinical practicum or seminar period are expected to contact the department office [(404) 894-7658] prior to the affected period. The course instructor must also be contacted as soon as possible in order to make arrangements for assignments and make-up activities. It is the student’s responsibility to also contact other individuals who rely upon their participation (i.e., lab partners, committee chairs, guest speakers to be introduced, clinical preceptors etc.).

Absences occurring without such prior notification of course instructors will be classified as an “unexcused” absence. If more than two unexcused absences occur for a given course, the student’s final course grade will be lowered by one whole letter grade. Under some circumstances, this may result in a student being placed on academic probation or in dismissal from the MSPO Program (See “Grades and Grade Point Averages [GPA] below”). Student status as a result of extended absence will be subject to review by the MSPO Program Director. Individual faculty members have the right to adopt their own course attendance policy, which will be communicated to enrolled students.

Inclement weather and changes in the class schedule

The established schedule of class meeting times will be followed as set forth in the course syllabi to the extent possible. If there are foreseen changes in the schedule, you will be notified as far in advance as is possible by the instructor or MSPO Program Director. Changes necessitated by an emergency will be posted on classroom doors and an attempt will be made to contact you via e-mail or the MSPO Student Calling Tree. When potentially hazardous weather conditions prevail (e.g., ice, sleet, snow, etc.), go to the Georgia Tech Home Page (www.gatech.edu), listen to the Georgia Tech radio station (WREK – FM 91.1), watch local television stations for Georgia Tech closure information.

Petition for Graduation

The Registrar’s Office requires two documents for graduation from each MSPO student: 1.) the Petition for Degree and 2.) the Approved Program of Study. These forms must be submitted to the School of Applied Physiology Office prior to the end of the semester proceeding your final semester, usually in the first month of
the term. You will be notified via e-mail when to submit these forms. The forms should be completed and submitted to Adrienne Durham in the School of Applied Physiology (before the due date). The forms will be reviewed to insure that the requirements have been met. After verification of meeting the graduation requirements, you will then take the approved forms to the Bursar’s Office and pay the graduation fee. Students must then take the forms to Degree Certification in the Registrar’s Office for final review and approval.

COMMENCEMENT PARTICIPATION POLICY

Participation in the Georgia Tech commencement ceremony is a public affirmation of a student’s successful completion of the Master of Science in Prosthetics and Orthotics Program. We realize, however, that select circumstances might prevent a student from completing required course work by the date of the commencement ceremony. Because we view it as desirable that students feel part of the Georgia Tech community by participating in the commencement ceremony, the following departmental policy was adopted.

In order for MSPO students to participate in the Georgia Tech Commencement Ceremony, they must:

1. Have attained a cumulative MSPO GPA of at least 2.7.
2. Have completed all initial or repeated Clinical Practicum courses with a grade of “Pass.”
3. Have completed all initial or repeated Research Seminar courses with a grade of “Pass.”
4. In the case item #2 is not satisfied, they must continue to demonstrate satisfactory performance during any Clinical Practicum course up through the Thursday prior to commencement weekend.
5. Demonstration of satisfactory performance during the final Research Seminar course offered in the 2nd semester of the final academic year up through the Thursday prior to commencement weekend.

Participation in the commencement ceremony is not a guarantee that a student will indeed graduate from the MSPO Program.

MSPO PROGRAM OUTCOME GOALS

Following successful completion of this program, graduates will:

1. Be competent generalist practitioners who can fill professional roles in a range of settings with clients/patients of diverse backgrounds across the life span.
2. Be integral members of the health care team, collaborating and effectively communicating with colleagues both within and external to the prosthetics and orthotics profession.
3. Have the potential for a positive impact upon the profession of prosthetics/orthotics, contributing to its growth, development and body of knowledge.
4. Participate in the management and administration of prosthetics/orthotics clinical and consultative services.
5. Develop, maintain and revise a formal plan for personal and professional development, including services and leadership roles, which enriches your own life and the lives of others.
6. Integrate, through problem-solving and clinical decision making, environmental, psychosocial, multicultural and age related aspects of patient care with clinical signs and symptoms.
7. Possess the knowledge and ability to critically evaluate and apply research.
8. Demonstrate mature, ethical, responsible, professional attitudes and behaviors, including respect for all individuals.
MSPO DEGREE AND PROGRAM COMPLETION REQUIREMENTS

To complete the MSPO program, students must pass all required courses. In addition:

- Students must complete an established minimum number of prosthetic and orthotic patient care experiences that involves fabrication projects as part of a treatment plan detailed within each P&O core clinical course including supervised medical and clinical P&O rotation modules (Clinical Practicum).
- Each student observes and then participates in the evaluation, measurement, molding, positive model rectification, fabrication, fit and assessment of a variety of prostheses and orthoses as part of a treatment plan utilizing models and human subjects. These supervised experiences occur within the Georgia Tech P&O clinical and fabrication labs prior to each student's relevant P&O clinical/technical rotation (Clinical Practicum).
- Within the Clinical Practicum, the student will perform elements of basic medical assessment, P&O clinical care and technical fabrication under supervision of credentialed professionals.
- Each student will complete a minimum of 500 contact hours of Clinical Practicum in medicine and P&O combined.
- Each student must attend the Brown Bag Research Seminars that are offered through the School of Applied Physiology (usually twice monthly) in order to learn the perspective of research from a variety of research investigators. Students must also successfully complete Research Seminar I, II and III.
- Completion of the capstone research investigation culminating in an oral presentation and written report. The capstone research investigation report is not a master's thesis but it is a rigorous report that is of sufficient quality that has the potential to be submitted as a manuscript to a research journal. Through the process of identifying a research topic (with assistance from faculty), formulating and conducting a research investigation under the advisement of research faculty, the MSPO student will gain an applied appreciation and understanding for the scientific method and as such, to challenge existing theory and perhaps create new knowledge for the P&O profession. The capstone research experience includes an investigation culminating in a written and oral report. Students are strongly encouraged to submit their research for presentation at a professional conference (i.e. poster presentation or oral presentation) or to submit a manuscript to a research journal for publication (i.e. as a research article or technical report). Students will be strongly encouraged to present their research at local, regional, national and international scientific conferences in order to disseminate new scientific knowledge.

EVALUATIONS

Student Evaluation of the MSPO Program
MSPO student evaluation and constructive feedback on a range of departmental components (e.g., MPSO Program, courses, faculty, resources, etc.) is critical to the development and maintenance of a high quality MSPO Program. Throughout the curriculum and after graduation, student assessments will be conducted using the following evaluation tools at the times indicated:

<table>
<thead>
<tr>
<th>Evaluation tool</th>
<th>When administered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of Guest Speakers</td>
<td>end of class period</td>
</tr>
<tr>
<td>GT Student Evaluation of Instructors</td>
<td>end of each Course</td>
</tr>
<tr>
<td>Written End of Semester Review of Program</td>
<td>end of semester after last final</td>
</tr>
<tr>
<td>Student Evaluation of the Clinical Education</td>
<td>following each cluster of clinical rotation experiences</td>
</tr>
<tr>
<td>Graduate Written Survey by Employer</td>
<td>1 year following graduation</td>
</tr>
<tr>
<td>Student Graduate Written Survey Evaluation I</td>
<td>1 year following graduation</td>
</tr>
<tr>
<td>Student Graduate Written Survey Evaluation II</td>
<td>5 years following graduation</td>
</tr>
</tbody>
</table>
Course Evaluation Process
Course evaluations provide important feedback for all faculty to gain information about how effective they are in facilitating your learning. In order to facilitate constructive dialogue between faculty and students regarding course and curriculum related issues within the department, the following have been adopted:
Students will have the opportunity to evaluate each course in which they are enrolled at semester’s end through the Georgia Tech Course Evaluation System. These evaluations are compiled and all responses are kept anonymous.

Student Academic Grievances
• If you would like to express concerns about a course, faculty member, other students or any academic related issues at other times during the semester, first speak directly to the course instructor(s) during their posted office hours or by appointment.
• If you choose to discuss a course with your advisor, the program director, or another faculty member, they will encourage you to first speak with the course instructor.
• If an issue cannot be resolved between yourself and the instructor, you may request that a meeting be held between the course instructor, yourself, and a mediator. The mediator may be your advisor, another faculty member, or one of the MSPO Program Co-Directors. Minutes of this meeting will be recorded by the mediator. Once it has been decided how the situation will be handled or a resolution is achieved, the mediator will forward a copy of the minutes to the MSPO Program Director.

Should the situation require additional support or advisement, students may wish to consider utilizing university resources including the Academic Support and Counseling Centers. In the event that the above procedure fails to resolve the issue, the student(s) may choose to talk with the Chair of the School of Applied Physiology or with the Dean of the College of Sciences. See the GT Student Handbook for additional information under Student Academic Grievance Procedures.

STUDENT CONDUCT

PROFESSIONAL BEHAVIORS
The MPSO program expects its students to develop and utilize appropriate professional behaviors within academic, clinical and other public settings. Professional behaviors are attributes, characteristics and behaviors that are not part of the profession’s core of knowledge and technical skills, but are nevertheless required for success in the profession. Program faculty has adopted the eleven (11) professional behaviors listed below as a standard for MSPO students.

In order to encourage appropriate professional behaviors by MSPO students, faculty members will serve as both role models and advisors relative to those behaviors. Additionally, each faculty member has the option to incorporate professional behaviors into the assessment of students in their courses (i.e., as a component of daily performance in the course or as a component of other assignments or practical examinations). As outlined in course syllabi, faculty has the ability to adjust course grades based on a student’s professional behaviors. Students who are not compliant with professional behaviors may be subject to disciplinary action for violation of the MSPO Student Code of Conduct (see next page).

Introspection and reflection are powerful tools for personal and professional development. MPSO students are encouraged to regularly self-assess their professional behaviors, with feedback and guidance from fellow students, course faculty and their advisors.
<table>
<thead>
<tr>
<th>Professional Behaviors</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Commitment to learning</td>
<td>The ability to self-assess, self-correct and self-direct; identify needs and resources of learning; continually seek new knowledge and understanding.</td>
</tr>
<tr>
<td>2. Interpersonal skills</td>
<td>The ability to interact effectively with clients/patients, families, colleagues, other health care professionals and the community; deal effectively with cultural/ethnic diversity issues.</td>
</tr>
<tr>
<td>3. Communication skills</td>
<td>The ability to communicate effectively (speaking, body language, reading, writing, listening) for varied audiences and purposes.</td>
</tr>
<tr>
<td>4. Effective use of time</td>
<td>The ability to obtain the maximum benefit from a minimum investment of time and resources.</td>
</tr>
<tr>
<td>5. Use of constructive feedback</td>
<td>The ability to identify sources of and seek out feedback; to effectively use and provide feedback for improving personal interaction.</td>
</tr>
<tr>
<td>6. Problem-solving</td>
<td>The ability to exhibit appropriate professional conduct and to represent the profession/program effectively.</td>
</tr>
<tr>
<td>7. Professionalism</td>
<td>The ability to fulfill commitments and be accountable for actions and outcomes.</td>
</tr>
<tr>
<td>8. Responsibility</td>
<td>The ability to identify sources of stress and to develop effective coping behaviors.</td>
</tr>
<tr>
<td>9. Critical thinking</td>
<td>The ability to question logically, identify, generate and evaluate elements of logical arguments, recognize and differentiate facts, illusions, assumptions and hidden assumptions; distinguish the relevant from the irrelevant.</td>
</tr>
<tr>
<td>10. Stress management</td>
<td>The ability to show consideration to others through polite expression. This is in contradistinction to rude conduct which is usually considered to indicate a lack of respect.</td>
</tr>
<tr>
<td>11. Respect</td>
<td>The ability to show consideration to others through polite expression. This is in contradistinction to rude conduct which is usually considered to indicate a lack of respect.</td>
</tr>
</tbody>
</table>

PROFESSIONAL ATTIRE

Few subjects are more subjective than what one should wear to appear “professional”. For any MSPO related activity that involves guest lecturers, outside observers or patient models, professional dress is required. In order to minimize uncertainty as to what is expected of MSPO students, the following guidelines are suggested:

Appropriate dress for male students is shirts, ties, and pants. Female students should wear dresses or skirts of knee length or longer or dress pants and blouses. Exposure of the abdomen or chest due to low cut blouses or pants, is not appropriate.
Please follow these other specific requirements as well:

- Scrubs should only be worn for lab activities.
- Jewelry and perfume/cologne should be worn at a minimum or not at all.
- Earrings should be worn in a professional manner and are limited to one to two per ear.
- Hair should be clean, well groomed, and worn in such a manner that it will not interfere with patient care or job duties and will present a professional image.
- Facial hair must be trimmed and kept clean.
- Baseball caps are unacceptable.
- Women may wear make-up in moderation.
- Fingernails should be kept short, clean, neatly manicured and not extend one-quarter inch past the fingertips. Artificial nails and nail jewelry are prohibited per Health Department regulations in any patient care role. Artificial nails are defined as any application of a product to the nail to include, but not limited to, acrylic, overlay, tips or silk wraps (does not refer to nail polish). Chipped nail polish is not permitted.
- There will be no visible tattoos; any visible tattoo must be covered with a bandage or clothing.
- Shoes should be close toed and non-skid shoes of low or moderate heel are recommended.
- A professional clinical lab coat with your name and the MSPO GT Logo is provided by the program for you. It should be worn when patient models are present, on clinical rotations and at any other time specified by the course instructor.

Lab Coats

During MSPO Orientation each year, first-year students are provided two lab coats, one for daily lab use and one embroidered with the student’s name for class photos and special occasions. Should a replacement coat be needed for any reason, one may be ordered on the student’s behalf, but replacement costs must be paid in advance by the student. The cost of a plain lab coat as of July 2015 is $32.50. Embroidery is an additional $9.00. Checks should be made payable to the Georgia Institute of Technology with a note in the memo section indicating that it is for a replacement lab coat.

MSPO Student Code of Conduct

Students in the MSPO Program are expected to adhere to the Georgia Tech “Student Code of Conduct,” including the policy on “Academic Dishonesty,” as stated in the Georgia Tech Student Handbook. Any violation of the “Student Code of Conduct” will be handled by the appropriate governing body. In conjunction with the actions of the university and other governing bodies, the MSPO Program reserves the right to assess any breaches in student conduct and to impose additional sanctions as follows:

1. **First incident:** An incident report will be completed by the faculty member who observed the incident. It will be submitted to the MSPO Program Director, the Chair of the School of Applied Physiology and to the Dean of Students at Georgia Tech. Action to be taken by the department may include, but is not limited to:
   a. Issuing a warning to the involved student concerning the unacceptable conduct. The MSPO Program Director will meet with the student. A written summary of this meeting will be sent to the student, the faculty member, the Chair of the School of Applied Physiology, and the Dean of Students.
   b. Immediate intervention by the MSPO Program Director in conjunction with the faculty of the School of Applied Physiology. Sanctions imposed may include, but are not limited to:
      1) a warning
      2) failing an assignment/project
      3) failing a related class
      4) suspension from the MSPO Program for a defined period of time
5) expulsion from the MSPO Program

c. Accepting actions of the university as outlined in the Georgia Tech Student Handbook

2. **Second incident:** A second breach of conduct, whether of the same or of a different nature, will be reported to the Chair of the School of Applied Physiology and the Dean of Students. All incidents are cumulative. Actions taken will be based on the nature of the breach of conduct; the repetitive nature of the incidents; and on any extenuating circumstances. Sanctions imposed may include, but are not limited to:

1.) failing an assignment/project
2.) failing a related class;
3.) suspension from the MSPO Program for a defined period of time;
4.) expulsion from the MSPO Program.

The School of Applied Physiology hopes that the aforementioned courses of action never need to be employed. The prosthetics/orthotics profession requires appropriate behaviors and conduct. The faculty of the School of Applied Physiology take seriously their responsibility to graduate professionals having well-developed professional behaviors and conduct.

**Student Use of Laptop Computers or Cell Phones in the Classroom**
Laptop computers and digital communication technology (i.e., pagers, cell phones and related technology) are **not** to be used by students during any lectures or laboratories.

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**Your Georgia Tech E-Mail Account**
Each student is issued a Georgia Tech user identification (ID) and password. To obtain your user ID and password and to activate your account, you must appear in person at the Customer Support Center in the main lobby of the Rich Information Technology building and show a picture ID. **Twenty-four hours after you register for classes you may go to the Rich building to activate your Georgia Tech email account.** The account provides access to your Georgia Tech email address, web home page location, a UNIX programming environment and other services. “What Students Need to Know” for OIT (Office of Information Technology) services can be found at [https://faq.oit.gatech.edu/](https://faq.oit.gatech.edu/) or [www.prism.gatech.edu](http://www.prism.gatech.edu)

It is your responsibility to check your Georgia Tech email account on a daily basis, especially if you have email forwarded to an Internet Service Provider (ISP). All official Georgia Tech correspondence is sent to your Georgia Tech email account. For example, notifications of job interviews, course changes, payments due, academic status, and graduation deadlines are sent to your Georgia Tech email account. In past years ISPs have failed to forward all emails from the Georgia Tech email account and thus some students did not receive crucial and time-sensitive communications. Please be aware that you may miss vital information that could affect your job search, academic status and graduation, if your ISP experiences difficulties.

**Email Etiquette**
An MSPO email list is established for all first and second year MSPO students. You may email all members of the first or second year classes at once. The MSPO student email list is a quick and easy way to reach wide numbers of your classmates. It is also very easy to abuse, both in volume and in content. Carefully consider what you email and to whom. Before sending an email to the whole class, ask yourself the question: Would every single person in this class want to read this email or would it be better for me simply to send it to a few members of the class who will appreciate it? In the vast majority of cases, the answer will be that the fewer people an email is sent to, the better.
JacketPages serves the student body at Georgia Tech by connecting students with student organizations and student organizations with your Student Government Association (SGA).

ASSISTANTSHIPS AND EMPLOYMENT

GT Employment: GRA's, GTA's, Residency Advisors & Other: Registration and Work Responsibilities

EMPLOYMENT: Due to the curricular demands of the MSPO program, employment is not advised. Students paid for clinical/technical work are not allowed to receive credit toward clinical practicum contact hours in the MSPO program.

Graduate Research Assistantship (GRA), Graduate Teaching Assistantship (GTA), Resident Advisor and other opportunities for employment are available to students in the MSPO program. These positions may or may not offer benefits beyond compensation including tuition remission, insurance, etc. Before accepting any employment while enrolled in the MSPO program, students should meet with their Student Advisors to discuss the implications of working while enrolled in the MSPO Program.

Students with a 1/3 or 1/2-time graduate assistantship must register for at least 12 credit hours on a letter grade or Pass/Fail basis. GRA/GTAs who are registered for less than 12 hours of letter grade or pass/fail courses will pay full tuition and fees based on their residency status and their total number of registered hours.

Assistantships are forms of employment and, as such, involve your responsibility to perform to the satisfaction of your supervisor. Students with a 1/3 or 1/2 time Applied Physiology GRA or GTA are required to work 14 to 20 hours per week. This includes the first week of classes and the week of final exams. You are expected to meet frequently and discuss your duties and responsibilities and the performance of those duties with your supervisor to insure that this obligation is being met satisfactorily. MSPO program GRAs or GTAs must maintain a cumulative and semester GPA of at least 3.0. Students with GRAs or GTAs may NOT have a job outside the School of Applied Physiology graduate assistantship and may forfeit their GRA if they accept additional employment.

STUDENT INJURY & EXPOSURES

Exposures: On Campus

Any exposure to hazardous material sustained by the student MUST BE REPORTED IMMEDIATELY to the student’s instructor or supervisor. Exposures include: a.) needle stick with a needle used on a specific person or patient; b.) needle stick with a needle from a trash or discarded container; c.) patient’s body fluid (blood, sputum, urine, vomitus) splash to eyes, nose, mouth, or open cuts; d.) mouth to mouth resuscitation; and e.) human bites. In the event of exposure, Student Health Services has established procedures which must be followed in addition documentation must be completed for Environmental Health and Safety (EH&S 404-894-4635). For more information, visit the Georgia Tech Wellness Center website at www.health.gatech.edu.

Injuries: On Campus

If a student receives a minor injury during daytime class hours, medical care may be obtained through the Georgia Tech Student Health Center. First Aid Kits are located in the MSPO Clinical Room and the MSPO Fabrication Room. For serious injuries it is recommended that the student be seen at the Grady Hospital Emergency Department. In the event of a serious injury, CALL CAMPUS POLICE (404-894-2500). In addition, AEDs are located in the Exercise Physiology Laboratory (Room 1506) as well as in the hallway adjacent to the east entrance lobby by the security desk.
Injuries or Exposures: Off-Campus

Any injury or exposure to hazardous material sustained by the student MUST BE REPORTED IMMEDIATELY to the instructor and supervisor. Each department or clinical site is responsible for identifying and following proper exposure procedure for their clinical affiliations.

Personal Protective Equipment

Students who choose not to utilize the safety glasses, dust masks/respirators, ear muffs, gloves and associated personal protective equipment provided by the MSPO program are responsible for purchasing similar equipment that meets all federal, state and institutional safety requirements.

TRANSPORTATION

Students will be responsible for providing their own transportation to attend off-campus courses and clinical rotations at Atlanta area medical centers, hospitals, and prosthetics/orthotics facilities and for other off-campus events directly related to the Georgia Tech MSPO Program. Students are encouraged to use public transportation and/or ride sharing with other classmates. Students are also responsible for any associated parking fees.
Students with Disabilities
Students with disabilities who may need testing modifications or other appropriate accommodations are encouraged to visit their web site at http://www.adapts.gatech.edu/ or contact the Access Disable Assistance Program for Tech Students (ADAPTS) at (404) 894-2563 so that the necessary arrangements can be made.

Georgia Tech Athletics
For information concerning Georgia Tech athletic events and how to get student tickets to games, go to www.ramblinwreck.com and click on 'TICKETS' and follow the link to Georgia Tech Student Tickets. After registering, you will be able to reserve tickets, create group blocks, and check loyalty points.

Intramural Sports
Located at the West end of campus, the Campus Recreation Center (CRC) is the base for most intramural activities. The complex contains a multi-purpose theatre containing aerobic machines for aerobic and weight training, rock climbing wall, gymnasium with courts for basketball, volleyball, badminton and tennis. In addition, the gym holds free weight training, table tennis, and golf driving areas. The complex also includes a gymnastics area, racquetball/handball courts, squash courts, a recreation swimming pool and additional fitness and diving pools, used for the 1996 Olympic Games.

Georgia Tech has other facilities available for a variety of recreational sports. Interested students may participate in either organized intramural athletic programs or individual athletics. Facilities include outdoor tennis courts located across from the coliseum at Tenth and Fowler streets, behind the area III dorms, and on top of the parking deck in Peters Park. The gym north of Grant Field/Bobby Dodd Stadium contains a 25-meter swimming pool and weight training equipment. Basketball courts are located in CRC, the old gym and freshman gym. Soccer, football, and softball may be played on Burger Bowl, Marathon, and Landis Fields.

The intramural program sponsors over 33 sports each year. Fall sports include football, volleyball, tennis doubles, racquetball doubles, cross-country, weightlifting, and free throw. The Spring program offers basketball, bowling, soccer, gymnastics, wrestling and basketball. Softball, golf, croquet, basketball, soccer, table tennis, billiards, foosball, street hockey, archery, water polo, water basketball, decathlon, and bicycling are also held in the Spring.

Short Term and Emergency Loans
Through the contributions of friends and patrons of the Institute a fund has been established that allows students to borrow money on a short term or emergency basis. A written application and an interview are required before a loan is granted. Upon approval, a student can expect to receive loan funds within two days after submission of an application. Applications for short-term school loans should be submitted at least two weeks before registration. Short term loans are considered for the following purposes: tuition, fees, room rent, board, books and supplies, business trips, post-graduation relocation or emergency expenses.

Free Legal Advice
An attorney is available for three hours one day each week to talk with students concerning legal issues. Georgia Tech students are urged to seek guidance if they have questions or problems. Such counsel will be especially advantageous if you are considering retaining an attorney to represent you in a court of law. Consultations on campus are private and free of charge. The campus legal adviser does not represent you in court, but he or she can instruct you as to the advisability of retaining a lawyer or signing an agreement. Students needing legal assistance should contact the Student Government Office at (404) 894-2814 or www.sga.gatech.edu.

TECH TRADITIONS
• Most of Georgia Tech’s traditions center around the image of the Ramblin’ Wreck. The nickname traces its roots back to 1890 when a train carrying students back from a football game in Athens was derailed. The connection with Tech was strengthened by some early graduates who were involved during the first
period of the industrial development in South America. Tech engineers in the underdeveloped countries, hampered by haphazard transportation, began constructing mechanical buggies. From this grew their reputation as the “ramblin’ wrecks from Georgia Tech”.

- Probably nothing has contributed more to the growth of Tech’s’ Ramblin’ Wreck image than the famed fight song that begins, “I’m a Ramblin’ Wreck from Georgia Tech”. It takes its melody from the old ballad, “The Sons of the Gaboliers”, but no one knows exactly when it was first sung on campus. The song was first printed in the 1908 yearbook and is regarded as one of the most famous campus fight songs around the world and was sung by Richard Nixon and Nikita Khrushchev at their 1959 meeting in Moscow. Whatever its beginnings, the song has made Tech’s name recognized throughout the world.

For those who feel compelled to know the entire song, all the lyrics appear below:

I’m a Ramblin’ Wreck from Georgia Tech and a hell of an engineer,
A helluva, helluva, helluva, helluva, hell of an engineer.
Like all the jolly good fellows, I drink my whiskey clear.
I’m a Ramblin’ Wreck from Georgia Tech and a hell of an engineer.

Oh, if I had a daughter, sir, I’d dress her in White and Gold,
And put her on the campus, to cheer the brave and bold.
But if I had a son, sir, I’ll tell you what he’d do.
He would yell, “To Hell with Georgia,” like his daddy used to do.

Oh! I wish I had a barrel of rum and sugar three thousand pounds,
A college bell to put it in and a clapper to stir it round.
I’d drink to all good fellows who come from far and near.
I’m a ramblin’, gamblin’, hell of an engineer.

- Another great Tech tradition is the Ramblin’ Wreck parade held during the homecoming weekend. The parade evolved from a traditional road race between Tech and University of Georgia students over a course from Atlanta to Athens. The race was initiated when roads and cars were pretty unreliable. Then, as cars improved, the higher speeds made the race a hazard to safety and it was eventually abandoned. The first actual Ramblin’ Wreck parade was held in November, 1933, when wrecks appeared at a pep rally and circled the field at the football game the next day. By 1936 the parade was institutionalized as a part of the homecoming celebration. It is run each year on the morning of Homecoming. The parade is a challenge to the ingenuity of Tech’s students to see who can produce the most outlandish contraption capable of traversing the course around campus.

- Sometime around 1920, a mythical student named George P. Burdell entered Tech and soon became a legend among the students. Burdell was created by an unidentified student who signed Burdell’s name to class rolls in addition to his own. The student even turned in separate exam papers, changing the handwriting and convincing many professors that Burdell was actually a student in good standing. In the years that followed, other students took up the task of keeping Burdell alive. Burdell spent his time writing letters to the editor of various student publications, subscribing to magazines (which he never paid for), and harassing insurance agents by ordering policies. In Spring, 1969, the first time Georgia Tech used computer registration; George beat the system by enrolling in every course the school offered. The computer system was improved, but George P. was not to be denied. In spring of 1975 he again was on the official roster of every course on campus. He is frequently paged at sporting events, airports – anywhere Tech alumni may gather.
In 1945, a dog (of dubious ancestry) arrived on campus and became one of the most beloved traditions in the postwar history of the school. She was a black and white, longhaired mongrel and was dubbed "Sideways" by the students because of the way she walked (due to an injury received when she was thrown from a car in front of the Varsity on North Avenue). Sideways was immediately adopted by the student body as their mascot. Her career as campus morale builder came to a sudden end in 1947 when she was accidentally poisoned. A permanent marker was erected in her memory next to the Administration Building.
MEMORANDUM

To: Cabinet, Deans, Vice Presidents, Vice Provosts, Executive Directors
From: G. P. "Bud" Peterson, President
Cc: Jennifer Herazy, Monique Tavares, JulieAnne Williamson, Nagela Nukuna, David Scripka
Date: May 12, 2016
Re: Recent Events

This past weekend we conferred more than 3,000 degrees during our commencement exercises in McCamish Pavilion. Shaking hands with our newest Georgia Tech graduates and joining them in celebrating their accomplishments is one of the most rewarding aspects of my job. Yet in the midst of this celebration there was sorrow: awarding a posthumous diploma to the parents of one of our undergraduates, who succumbed to sudden acute illness in April.

Georgia Tech lost several other students this academic year, some as a result of suicide. While the loss of any member of our community is tragic, the death of a loved one through suicide is particularly devastating. We have been deliberate in communicating suicides to the campus community, balancing the desire to inform, while respecting the family's desire for privacy. In most cases, the message is disseminated within the college where the student was enrolled. Based on recent feedback we have received, we will review our current protocol to foster a more consistent practice across all units. Whether or not the campus community hears about details of a particular case, we want them to know that we care, and that there are resources available to assist them.

We are committed to nourishing a culture of health, well-being and caring, where our students and employees can flourish and be fulfilled emotionally, physically, professionally, socially, and spiritually. In January 2015 we made changes to take a more holistic and inclusive approach to campus wellness, incorporating feedback from our Mental Health Task Force and the Sexual Violence Task Force. Sexual violence prevention, alcohol and drug prevention, and mental health are included in the initiative. We have brought together the Campus Recreation Center, Health Promotion, and Stamps Health Services to form the Center for Community Health and Well-Being under the direction of Dr. Suzy Harrington. We have added resources to the Counseling Center, including filling vacant counselor positions and adding four new counselors. We have also hired two new victim advocates to work in our sexual violence prevention and support efforts. Georgia Tech is inviting the faith community to be included as part of overall wellness initiative.

To help answer any questions you may receive, below is a list of some of the resources available to the Georgia Tech community:
For Students:
The Georgia Tech Counseling Center (www.counseling.gatech.edu) is staffed by psychologists and mental health counselors. Over the past two years, we filled four vacant counselor positions and created four new counselor positions to better serve students in a timely manner. The Counseling Center offers brief, confidential counseling and crisis intervention services to students. The Counseling Center also offers an after-hours on-call counselor to speak and consult with students in crisis. In addition, they sponsor a series of workshops for managing stress.

Stamps Health Services (http://health.gatech.edu/services/Pages/Psychiatry.aspx) to students and their spouses. Students interested in scheduling an appointment may call 404-894-2585 or visit the second floor of Student Health Services.

The Office of the Dean of Students also has a referral option if you are concerned about a student (www.deanofstudents.gatech.edu).

For Staff and Faculty:
The Georgia Tech Faculty and Staff Assistance Program (http://ohr.gatech.edu/facultystaff-assistance-program) provides help at no cost to employees who suffer from personal/emotional problems that may affect performance at work. Each faculty and staff member is eligible for one to three sessions per calendar year and one executive coaching session per calendar year.

For Staff, Faculty and Students:
The Georgia Crisis & Access Line (1-800-715-4225) is staffed with professional social workers and counselors 24 hours per day, every day, to assist those with urgent and emergency needs. www.mygcal.com.

Please feel free to share this information as appropriate. Working together, we can continue to ensure that we have a healthy and thriving campus community for everyone.
Essential Skills/Functions for the Georgia Tech MSPO Program

(This document outlines cognitive and physical abilities required of the matriculating student to possess and maintain while in the program)

In accordance with Section 504 of the 1973 Vocational Rehabilitation Act, the MSPO program has established the following essential skills/functions requirements for students in its educational program. MSPO students must demonstrate, with or without reasonable accommodations to guidelines and practices, the ability to perform the essential skills/functions listed below during their MSPO education:

1. Participate in supervised clinical activities for eight-hour days;

2. Demonstrate sufficient vision to perform such tasks as (but not limited to) interpreting a medical record, inspecting wounds, and determining gait deviations, reading mechanical gauges, markings and inscription;

3. Physically and visually utilize chemicals, power tools and manual tools while following all appropriate safety precautions;

4. Demonstrate the physical capability to work in a prosthetics and orthotics laboratory for four-hour periods;

5. Demonstrate sufficient arm strength, balance, coordination, and sensation to perform such activities as (but not limited to) impression taking, manual muscle testing, range-of-motion testing, soft-tissue and bony evaluations; use power and manual tools without loss of control; ability/strength to contour metal, thermoplastics and other materials with appropriate instruments;

6. Utilize appropriate verbal, nonverbal, and written communications with clients/patients, their families, classmates, faculty and staff;

7. Practice in a safe, ethical and legal manner;

8. Determine the prosthetic, orthotic and rehabilitation needs of any patient with an existing or potential movement dysfunction;

9. Demonstrate the ability to apply universal precautions (i.e., use of examination gloves when treating patients, use of eye safety when in machine room, etc.);

10. Safely, reliably, and efficiently perform appropriate prosthetic and orthotic procedures. These include (but are not limited to) the assessment of cognitive/mental status, vital signs, skin and vascular integrity, wound status, endurance, segmental length, girth and volume, sensation, strength, tone, reflexes, movement patterns, coordination, balance, developmental stage, soft tissue, joint motion/play, cranial and peripheral nerve function, posture, gait, functional abilities, assistive device design, manufacture, fit, use, and modification;

11. Perform prosthetic and orthotic treatment procedures in a manner that is appropriate to the client/patient’s status and desired goals. These include (but are not limited to) functional training in self-care related to use of a prosthesis and orthosis. Functional training related to use of a prosthesis and orthosis in work/home activities, balance training, coordination training, positioning techniques, and cardiopulmonary resuscitation (CPR);

12. Develop and document a plan of prosthetic and orthotic care for a patient with a movement dysfunction;

13. Recognize the psychosocial impact of dysfunction and disability and integrate the needs of the patient and family into the plan of prosthetic and/or orthotic care;
14. Demonstrate responsibility for lifelong professional growth and development;

15. Demonstrate management skills including planning, organizing, supervising, delegating, and working as a member of a multi-disciplinary team;

16. Apply teaching/learning theories and methods in health care, laboratory and community environments;

17. Participate in the process of scientific inquiry.

The MSPO program will consider all applicants for admission who demonstrate the ability to learn and perform the essential skills/functions identified in this document. The MSPO education program must ensure the health, safety, and security of all clients/patients as well as fellow students, faculty and staff. Eligibility to enter or continue in the program will be based on scholastic accomplishments, as well as the physical and emotional fortitude to perform the essential skills/functions necessary to meet the requirements of the program’s curriculum and to become an effective practitioner.

The students will meet each semester with a faculty advisor to assess student compliance with these essential skills/functions and to note any progress. Any deficiencies will require a plan for correction. Continued deficiencies may result in student placed on warning or probation, or in extreme circumstances, dismissal from the program.
Essential Skills/Functions for the Master of Science in Prosthetics and Orthotics Program
Acknowledgement Form

Georgia Institute of Technology
School of Biological Sciences

I, ____________________________, understand that I must demonstrate mastery of the essential skills/functions described in the Essential Skills/Functions for the Georgia Tech Master of Science in Prosthetics and Orthotics (MSPO) Program document prior to my graduation from the MSPO program. If I have a disability and need an accommodation, I agree to provide appropriate documentation of the disability to the Office of Disability Services at Georgia Tech with a request specifying desired accommodations.

This request must be presented in a timely manner prior to the need for accommodation to permit the Coordinator of Services for Students with Disabilities in collaboration with the MSPO Program Director to process the request. The MSPO Program Director will determine if any recommended accommodation will fundamentally alter the MSPO program of study.

Signature __________________________________________ Date ______________

Name (Printed) __________________________________________

Summary of Essential Knowledge, Skills and Functions necessary for students to advance in the MSPO Program:
1) Student must successfully pass each core course in the MSPO program.
2) At the discretion of the faculty, student must successfully pass the oral/practical examination in any core course in the MSPO program.
3) Student must maintain a minimum cumulative GPA of 2.7.
4) Student must successfully complete required contact hours in all courses in order to advance in the program.
5) Student must successfully and sequentially pass all MSPO core courses in order.
6) Student must maintain adherence to the essential knowledge, skills, and functions.
7) Corrective actions may be imposed upon any student deficient in any of the above areas.

Contact the Master of Science in Prosthetics and Orthotics Academic Program Coordinator, Adrienne Durham, at (404) 894-7658 if you have any questions about the essential skills/functions requirements stated above. Questions regarding disability certification and/or requests for accommodation should be directed to the Office of Disability Services by calling (404) 894-2563 (voice) or (404) 894-1664 (TDD), or by visiting their website at http://disabilityservices.gatech.edu/. Georgia Tech is committed to prohibiting discrimination based on disability.

*Essential skills/functions adapted from:

*Additional guidelines of essential functions adapted from:

Commission on Accreditation of Allied Health Education Programs Standards and Guidelines for an Accredited Educational program for the Orthotist and Prosthetist, 1993.
For good and valuable consideration, the undersigned hereby grants the GEORGIA INSTITUTE OF TECHNOLOGY ("GIT") and the GEORGIA TECH RESEARCH CORPORATION ("GTRC") the absolute and irrevocable right and permission, in respect to the photographs, video tapes, motion pictures, recordings, or any other media (hereinafter collectively known as "Images") which GIT/GTRC has taken of me or my property (description and address of property: ________________) or in which I may be included with others, to copy the same, in GIT/GTRC’s own name or otherwise, to use, re-use, publish, and re-publish the same in whole or in part, individually or in conjunction with other Images, and in conjunction with any printed matter, in any and all media now or hereafter known, and for any legitimate purpose whatsoever, and to use my name in connection therewith if GIT/GTRC so chooses. I hereby waive my right to inspect or approve the Images or any furnished version incorporating the same.

The undersigned does hereby release and forever discharge GIT, GTRC, and the Board of Regents of the University System of Georgia, their members individually, and their officers, agents, and employees of any kind from all claims, demands, rights, and causes of action of whatever kind of nature, arising from and by reason of any and all known and unknown, foreseen, and unforeseen injuries, damages, and the consequences thereof resulting from the use of the Images, including without limitation any and all claims for libel or invasion of privacy.

I understand that the acceptance of this release and waiver of liability by the Board of Regents of the University System of Georgia shall not constitute a waiver, in whole or in part, of sovereign immunity by said Board, its members, officers, agents, and employees.

This authorization and release shall also inure to the benefit of the heirs, legal representatives, licensees, and assigns of GIT, GTRC, and the Board of Regents of the University System of Georgia. I HEREBY CERTIFY THAT I AM _____ YEARS OF AGE and suffering under no legal disabilities and that I have read the above carefully before signing. This release shall be binding upon me and my heirs, legal representatives, and assigns.

NAME (Print & Signature)   DATE

NAME (Print & Signature) of parent/legal guardian if subject is a minor   DATE

ADDRESS   PHONE NUMBER

WITNESS (Print & Signature)
Patient Participant Consent Form

Participant Name: ___________________________ Date: ____________

Address:

(Street) ___________________________ (City) ___________________________ (State) ___________________________ (Zip Code) ___________________________

Phone: ___________________________

(include area code)

I have been asked to participate in a classroom demonstration of prosthetics and/or orthotics evaluations and/or procedures. I understand that the procedures will be explained to me and that I have the right to ask questions and to withdraw my consent and stop taking part in the classroom activity at any time without prejudice to me.

The undersigned does hereby release and forever discharge Georgia Institute of Technology (GIT), Georgia Tech Research Corporation (GTRC), and the Board of Regents of the University System of Georgia, their members individually, and their officers, agents, and employees of any kind from all claims, demands, rights, and causes of action of whatever kind of nature, arising from and by reason of any and all known and unknown, foreseen, and unforeseen injuries, damages, and the consequences thereof resulting from participation in the classroom activity.

I hereby freely consent to take part in this classroom demonstration of:

(briefly describe evaluation/procedures) ___________________________ (date or dates) ___________________________

Signature of Participant: ___________________________ Date: ____________

Signature of Parent/Legal Guardian: ___________________________ Date: ____________

Signature of Witness/Auditor: ___________________________ Date: ____________

Signature of Faculty Member: ___________________________ Date: ____________
Student Participant Consent Form

Participant Name: ______________________________ Date: __________

Address:  
(Street) (City) (State) (Zip Code)

Phone: ______________________________
(include area code)

As part of my enrollment in the MSPO program, I will be asked to participate in classroom demonstrations of prosthetics and/or orthotics evaluations and/or procedures. I understand that the procedures will be explained to me and that I have the right to ask questions and to withdraw my consent and stop taking part in the classroom activity at any time without prejudice to me.

The undersigned does hereby release and forever discharge Georgia Institute of Technology (GIT), Georgia Tech Research Corporation (GTRC), and the Board of Regents of the University System of Georgia, their members individually, and their officers, agents, and employees of any kind from all claims, demands, rights, and causes of action of whatever kind of nature, arising from and by reason of any and all known and unknown, foreseen, and unforeseen injuries, damages, and the consequences thereof resulting from participation in the classroom activity.

I hereby freely consent to take part in classroom activities during my tenure in the MSPO program.

Signature of Student: ______________________________ Date: __________

Signature of Faculty Member: ______________________________ Date: __________
CONSENT AND RECEIPT OF STUDENT HANDBOOK FORM

This is to certify that I have received and am responsible for the contents of the 2016-2017 Master of Science in Prosthetics and Orthotics (MSPO) Program and the 2016-2017 Georgia Institute of Technology General Catalog as received by me on August 15, 2016.

I realize that if there is any section that I do not understand it is my responsibility to seek clarification from my advisor, the MSPO Program Director (Géza F. Kogler), an MSPO faculty member (Christopher Hovorka, Lee Childers, Chris Fink), or other MSPO program personnel.

Print name: ____________________________________________________________

Signature: _____________________________________________________________

Date: __________________________________________________________________

Note: The information contained in this handbook is presented as an informational guide. The information is not intended to, nor does it contain all the regulations that relate to students. This handbook for MSPO students, although revised periodically, cannot always reflect up-to-the-minute changes or developments in the MSPO program. Contents within this handbook are therefore subject to revision without notice. Changes will become effective whenever the MSPO program so determines and will apply to both prospective MSPO students and those MSPO students already enrolled. The MSPO program reserves the right to alter any and all guidelines affecting MSPO students.

CONTACT INFORMATION

Students are required to provide their current contact information (address, phone, email) on file in the School of Applied Physiology office from the beginning to end of their tenure of the MSPO program.

We require that you update our records to include any name changes that may have occurred during the summer, your current address and emergency contact information. **You are required to keep us informed of any name or address changes as they occur throughout the school year.** If anyone anticipates a name change during the school year, you are required to let us know at this time and the approximate time for the change.

Emergency Contact Person #1: _____________________________________________

Emergency Contact Person #2: _____________________________________________

Emergency Phone Number: _______________________________________________

Maiden name (if married): ________________________________________________

Your Current Address: _____________________________________________________

City, State, Zip: _________________________________________________________

Current Phone: _________________________________________________________

E-mail address: _________________________________________________________

Date: __________________________________________________________________