

Graduate Student Handbook

Master of Science (MS) in Health and Human Physiology

The University of Iowa

Department of Health and Human Physiology

CONTENTS

Contents	2
Commonly Used Terms	3
Part I: General Information.....	4
Degree Programs.....	4
Tracks within the M.S. in HHP.....	4
Admission Requirements	4
Graduate Appointments	6
Course Loads and Grading Scales.....	9
Academic Standing, Probation and Dismissal	9
Student Complaints Concerning Faculty Actions.....	12
Miscellaneous Information	12
Departmental and Tuition Scholarships.....	15
Part II: Specific Information	16
Specific Information relevant for all subtracks within the M.S. in HHP	16
Curriculum for MS in HHP – Clinical Exercise Physiology (CEP) Subtrack	17
Final Examination Procedures for M.S. in HHP - CEP Subtrack.....	19
Curriculum for MS in HHP – Athletic Training (AT) Subtrack	22
Final Examination Procedures for M.S. in HHP – AT Subtrack	24
Curriculum for MS in HHP with Thesis	26
Thesis and Final Examination Procedures for M.S. in HHP with thesis	29
Curriculum for MS in HHP – Child Life (CL) Subtrack	31
Final Examination Procedures for M.S. in HHP – CL Subtrack.....	32
Part III: Changes in Degree Requirements or Degree Objectives.....	33
Changes in Degree Requirements	33
Changes in Degree Objectives	33

COMMONLY USED TERMS

AT: Athletic Training

CEP: Clinical Exercise Physiology

CL: Child Life

CLAS: College of Liberal Arts and Sciences

Degree Candidate: An M.S. student is considered a degree candidate after the successful completion of 18 semester hours of graduate credit while maintaining a cumulative grade-point average on graduate work done at The University of Iowa of 2.75 or better.

Departmental Executive Officer: The Departmental Executive Officer (DEO or Department Chair) is the administrative officer of the department and makes all administrative decisions on matters related to departmental programs.

Formal Plan of Study: A (formal) plan of study must be submitted and approved by the Graduate College at the time of the application for the final examination. This plan of study reflects all changes that have been made in the preliminary plan of study and includes all degree requirements which must be completed satisfactorily in order to graduate.

GCM: The Manual of Rules and Regulations of the Graduate College (Graduate College Manual) is available using the following web site address:
<http://www.grad.uiowa.edu/graduate-college-manual>

HHP: Health and Human Physiology (the name of our department)

Preliminary Plan of Study: A candidate must have the program advisor's approval of a preliminary plan of study which is completed during the first semester of graduate study. This preliminary plan lists all courses and other degree requirements that must be completed satisfactorily by the candidate.

Program Advisor: The program advisor is the department faculty member directly responsible for advising the student. The program advisor is appointed by the DEO in consultation with the student and the faculty in the area of specialization.

PART I: GENERAL INFORMATION

All graduate degrees offered by The University of Iowa are granted by the Graduate College in accordance with the requirements set forth in the Manual of Rules and Regulations of the Graduate College (GCM, <http://www.grad.uiowa.edu/graduate-college-manual>). Departments may impose requirements that are more stringent than those of the Graduate College; however, in no instance may departmental requirements be less stringent than Graduate College requirements.

The material presented in this handbook provides an official source of information about departmental requirements, regulations, procedures, and policies that relate to graduate students in the M.S. in Health and Human Physiology program within the Department of Health and Human Physiology (HHP). Where appropriate, certain requirements of the Graduate College are also presented. Students are urged to consult the GCM for full details about Graduate College requirements.

Degree Programs

The Department of HHP offers programs of graduate study leading to (1) the Ph.D. degree in HHP, (2) the M.S. degrees in HHP, and (3) the M.A. degree in Leisure Studies. In addition, the department offers opportunities for students to pursue individualized programs of study for the purpose of professional improvement but not leading to a graduate degree. *This document is the Graduate Student Handbook for the M.S. degree in HHP.* There are separate Graduate Student Handbooks for the Ph.D. degree in HHP and for the M.A. in Leisure Studies.

Tracks within the M.S. in HHP

The M.S. in HHP has four formal subtracks:

1. M.S. in HHP with thesis
2. M.S. in HHP – Athletic Training (AT). This is a non-thesis subtrack.
3. M.S. in HHP – Clinical Exercise Physiology (CEP). This is a non-thesis subtrack.
4. M.S. in HHP – Child Life (CL). This is a non-thesis subtrack.

Admission Requirements

Minimum Requirements: Applicants must have an U.S. bachelor's degree from a regionally accredited college or university, or an equivalent degree from another country as determined by the Office of Admissions. In addition, a minimum grade-point average (GPA) of 3.00, or foreign equivalent as

determined by the Office of Admissions is required.

Graduate Record Examination (GRE): All applicants for the M.S. in HHP are required to have their Graduate Record Examination (GRE) scores on file with the department before they are admitted, except for the CL subtrack. However, if all admission data except the GRE scores are on file, and if minimum requirements are met, the applicant may be admitted on a conditional basis for one semester during which the GRE must be taken and the scores filed with the department. Being admitted on a conditional basis does not guarantee acceptance as a regular student at a later date. Only those applicants who have GRE scores on file are considered for regular admission and graduate appointments (i.e., teaching assistantships, research assistantships, or fellowships).

English Proficiency for International Students: Information for International Students: Prior to consideration for admission, international student applicants whose native language is other than English must take either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS), unless they have received a degree from an accredited college or university in the United States, the United Kingdom, Canada (except Quebec), Australia, or New Zealand. The minimum scores are 550 for the paper based (PBT) TOEFL, 81 for the internet-based (IBT) TOEFL, and a total score of 7.0 with no subscore less than 6.0 for the IELTS. International students transferring from unfinished degree programs of other universities in the United States who have not taken either of these examinations, or who have received a score lower than the minimum established by the Graduate College Dean, must take the TOEFL or IELTS examination and receive a passing score prior to consideration for admission. Students who barely pass the established minimum on the TOEFL (i.e., below 600 for the PBT and below 100 for the IBT), as well as all IELTS submitters, are required to complete an English Proficiency Evaluation on campus before their first registration for classes. The Graduate College will require these students to take and pass recommended course work in English usage at The University of Iowa designed especially for international students. In order to be eligible for a teaching assistantship, international students must pass an English usage examination. For more information see: <http://www.uiowa.edu/admissions/graduate/international/english-grad.htm>

Application procedure: All students seeking to register for the first time in the Graduate College of the University of Iowa must secure formal admission from the director of Admissions. Applicants may obtain the proper forms from: Director of Admissions, 107 Calvin Hall, The University of Iowa, Iowa City, Iowa 52242. Prospective students may also download the application forms from:

<http://grad.admissions.uiowa.edu/sites/default/files/uploading/files/grad-app.pdf>

or apply online from the admissions web site at:

<https://apply.admissions.uiowa.edu/admissions/login.page>

In addition to these forms, additional materials need to be submitted to:

The Department of HHP:

Official academic records/transcripts
Three letters of recommendation
Application for Graduate Awards
A personal statement

Graduate Admissions:

A second set of official records/transcripts
Official GRE scores
TOEFL or IELTS scores (international students only)
Financial Statement (international students only)

Admission to the M.S. in HHP is granted by the Department Executive Officer (DEO) in consultation with the department faculty. Admission to the M.S. program is not the equivalent of acceptance as a candidate for an advanced degree. An M.S. student is considered a degree candidate after the successful completion of 18 semester hours of graduate credit while maintaining a cumulative grade-point average on graduate work done at The University of Iowa of 2.75 or better.

Admission Cycles and Deadline: Admission to the M.S. in HHP is typically only granted for the fall semester. Application deadline is February 1.

Admission Criteria: The GRE scores, together with grade-point averages (GPA) and letters of recommendation, serve as the basis for admitting applicants to the M.S. program and for advising them concerning appropriate tracks within the M.S. program. No particular minimum GRE score is required for admission; however, in general successful applicants score in the upper 50%ile of all test takers for a given year. Additional admission criteria are specified for the CL subtrack under the curriculum section for that subtrack.

Graduate Appointments

Three types of graduate appointments may be awarded: teaching assistantships, research assistantships, and graduate assistantships for athletic trainers. These are described in the latter portion of this section.

Applications: Initial applications for graduate appointments should be made by completing:

1. The Application for Graduate Awards Form:
<http://www.uiowa.edu/admissions/applications/grad-apps/gradaward.pdf>
2. The Personal Data Sheet for Potential Graduate Students
<http://www.uiowa.edu/admissions/applications/grad-apps/int-phys-pers-data.pdf>
3. Optional for students interested in teaching Physical Activity skills:
The Health and Physical Activity Skills Program Teaching Proficiency Inventory available from:
<http://grad.admissions.uiowa.edu/sites/default/files/uploading/files/ex-sci-ms-skills-inventory.pdf>

To be considered for an appointment, the student must also have on file in the department office (1) a statement of admission by the Graduate College; (2) the GRE scores, if required; (3) TOEFL scores, if required; and (4) at least three letters of recommendation from persons acquainted with the student's academic performance and work experience.

Appointments: Graduate appointments for the academic year are made in March, if possible, and become effective the following August. Application for graduate appointments together with all supporting data should be on file in the department office by February 1.

All graduate appointments are made on a semester basis but are ordinarily honored for the full academic year. Students may apply for reappointment which is subject to the provisions stated in the Reappointments and Limits of Support paragraphs which follow.

A limited number of summer TA and/or RA appointments are available. These are awarded on the basis of available funding, specific need, demonstrated quality of previous work and seniority. Such support is in addition to the academic year support and is not considered in determining an individual's limits of support.

Reappointments: To be eligible for reappointment, the student must (1) have satisfactorily completed not less than 15 semester hours of graduate course work during each academic year enrolled unless permission to enroll for less credit has been granted; (2) be in good academic standing, i.e., not on academic probation; (3) be recommended for reappointment by the graduate program director; and (4) not have utilized all of the years of appointment available (see Limits of Support paragraph which follows).

Students currently holding graduate assistantships are asked in February of each year whether they wish to be considered for reappointment for the following year. The DEO, in consultation with the department faculty, evaluates all such applicants in terms of (1) progress toward the degree for which each is a candidate, and (2) performance rendered in the position held by the appointee. On the basis of this evaluation, the DEO makes a decision regarding each student's application for reappointment. Students are notified by letter of the action taken as soon as possible after the evaluation is completed.

Limits of Support: The department has adopted the following policy concerning the length of time financial support in the form of teaching assistantships, research assistantships, fellowships, etc., may be provided:

1. Students in the M.S. in HHP program may receive support for no more than two years in obtaining the M.S. degree.
2. If unforeseen circumstances develop which make it impossible for a student to complete their degree within the above time frame, a formal appeal may be made requesting additional funding. Such appeals should be made to the DEO who will consult the mentor of the student for a final decision.

Pay Schedule and Tuition: Stipends are paid to students in ten equal installments beginning September 1 and ending June 1. Graduate teaching and research assistants holding one-quarter-time or greater appointments will be assured a tuition scholarship that covers approximately the tuition costs for a 9 s.h. registration. The scholarship will be pro-rated, so that students who are registered for less than 9 s.h. will receive the appropriate percentage, according to the number of hours for which they are registered.

Work Schedule: Departmental policies related to the work schedule for all graduate teaching and research assistants are as follows.

1. Half-time graduate assistants are required to average twenty (20) hours of service each working week; one-third-time graduate assistants, thirteen (13) hours of service each working week; and one-quarter-time graduate assistants, ten (10) hours of service each working week. For graduate teaching assistants, allowances are made for time spent in preparing lesson plans, getting equipment and facilities ready for class use, and evaluating and grading student performances.
2. Graduate assistants with appointments for the academic year are typically required to report for work three (3) working days before the beginning of the first semester and work through final examination week and until final course grades are recorded. They are typically required again to

report for work three (3) working days before the beginning of second semester classes and work through the end of final examination week and until final course grades are recorded.

3. Graduate assistants are entitled to two weeks of vacation during the academic year. Normally, this would be taken during the break between semesters. Please note, this means you are typically not entitled to the entire break period between semesters unless specific arrangements are made between you and your supervisor. Such arrangements typically include a plan for making up the hours missed by a more extended break.
4. Graduate assistants are entitled to the following holidays each year:
 - New Year's Day
 - Dr. Martin Luther King Birthday
 - Memorial Day
 - Independence Day
 - Labor Day
 - Thanksgiving Day
 - Friday after Thanksgiving Day
 - Christmas Day
 - One day before or after Christmas Day
5. Graduate assistants with appointments for the summer session typically report for work two (2) working days before the beginning of summer session classes and typically work through the last day of classes for the session and until final course grades are recorded.
6. Departures from this schedule are permitted only when the graduate assistant makes previous arrangements with the supervising faculty member in consultation with the DEO. Makeup work for such absences is expected.

Teaching Assistantships: In selecting graduate students for teaching assistantship appointments, the following items are considered: (1) grade-point average and scores on the Graduate Record Examination, (2) teaching experience, (3) scores on the English language proficiency test, and (4) past performance as a teaching assistant. Graduate teaching assistants may be assigned to teach in the Health and Physical Activity Skills Program or in any other Department of HHP courses. The University of Iowa requires that all graduate teaching assistants complete a specific training program before beginning teaching duties.

Oral Communication Competence for Teaching Assistants: The Iowa Board of Regents has adopted a policy on oral communication competence designed to ensure that all instructors have "the ability to communicate appropriately in the language of instruction to students attending Regents' Institutions." New teaching assistants are evaluated by the middle of the first semester of teaching and by the end of every subsequent semester by their supervisor for oral communication competence. A question on oral communication competence is included on the form the department uses for student evaluations of teaching for this purpose.

Research Assistantships: Research assistants are appointed by the DEO. In making such appointments, seniority, expertise in an area of specialization and scholarly productivity are considered. Research

assistants are assigned to and supervised by specific faculty members and assist in conducting the research carried on by the faculty member. Appointments of students to be supported by grants and other external funding sources will be made by the project director in consultation with the DEO.

Graduate Assistantships with the University Athletic Training Services: These graduate assistantships are only available to students in the Athletic Training (AT) track within the M.S. in HHP. To be eligible for these assistantships, students must obtain Board of Certification (BOC) for the Athletic Trainer certification status by the end of the first fall semester. In the event BOC certification is not obtained, the graduate appointment will be canceled.

Course Loads and Grading Scales

A full-time course load for a graduate student making satisfactory academic progress toward a degree is nine (9) semester hours or more of graduate credit. Half-time graduate assistants must have special permission to carry more than 12 semester hours of graduate credit each semester.

Courses Taken for S and U Grades: The following department policies regarding courses that may be taken for grades of S and U apply to all students pursuing programs leading to graduate degrees.

1. All core and required prerequisite courses for graduate degrees must be taken for conventional letter grades, i.e., such courses may not be taken for S and U grades.
2. Except in unusual circumstances, all elective courses for the M.S. degree must be taken for conventional letter grades. The DEO, in consultation with the student's mentor and course director of the elective course, shall determine whether the circumstances warrant the waiver of this policy.

Grades of S and U for Graduate Seminars, Internships and Practicums, Research, Thesis and Problems: Grades of S and U may be awarded for work completed in graduate seminars, internships and practicums, research, thesis and problems.

Academic Standing, Probation and Dismissal

The department follows the standards and procedures relating to academic standing, probation, and dismissal that are established by the Graduate College and the College of Liberal Arts and Sciences.

Academic Standing: A master's student, except one on conditional status, will be placed on probation if, after completing 8 semester hours of graduate work, the student's cumulative grade-point average on graduate work done at The University of Iowa falls below 2.75. If, after completing 8 more semester hours of graduate work at this University, the student's cumulative grade-point average remains below 2.75, the student will be denied permission to reregister within any departmental program; otherwise the student will

be restored to good standing.

Restriction on Students on Probation: A student on probation is not permitted to take comprehensive or final examinations leading to any degree or certificate, nor may the student receive any graduate degree or certificate. In addition, students on probation may not be eligible for graduate scholarships or fellowships, which may preclude eligibility for tuition scholarships.

Academic Fraud: Academic fraud, such as plagiarism and cheating, is defined in the CLAS Academic Handbook Chapter X (<http://www.clas.uiowa.edu/students/handbook>). Plagiarism is presenting someone else's words or ideas as your own whether in writing or in speaking and includes these and other misrepresentations:

- Presentation of ideas from any sources you do not credit;
- Use of direct quotations without quotation marks and/or without credit to the source;
- Paraphrasing information and ideas from sources without credit to the source;
- Failure to provide adequate citations for material obtained through electronic research
- Downloading and submitting work from electronic databases without citation;
- Participation in a group project which presents plagiarized materials;
- Taking credit as part of a group without participating as required in the work of the group;
- Submitting material created/written by someone else as one's own, including purchased term/research papers.

Academic cheating includes all of the following and any other activities that give a student an unfair advantage in course work:

- Copying from someone else's exam, homework, or laboratory work;
- Allowing someone to copy or submit your work as his/her own;
- Accepting credit for a group project without doing your share;
- Submitting the same paper in more than one course without the knowledge and approval of the instructors involved;
- Using notes, text messaging, cell phone calls, pre-programmed formulae in calculators, or other materials during a test or exam without authorization;
- Not following the guidelines specified by the instructor for a "take home" test or exam.

Disciplinary Actions for Minor transgressions: If the departmental graduate faculty determine that the transgression is not major, or else feel that there is a misunderstanding of the acts which constitute plagiarism, the graduate faculty will work with the student so as to prevent future occurrences of plagiarism on the part of the student. Written notification of the offense and the remediation for the offense will be sent to the Graduate College for inclusion in the student's file.

Disciplinary Actions for Major transgressions: If the departmental graduate faculty discover an act (or acts) of plagiarism that is (are) sufficiently egregious that expulsion from the program is warranted, the student will be terminated from the graduate program for reasons of plagiarism. In this case, the student will be

simultaneously terminated from the Graduate College of The University of Iowa. The department will notify the student of his or her termination in writing. All relevant facts, as well as the process for appealing the decision, will be contained in the termination letter. The Graduate College will receive a copy of the termination letter. If the graduate student resigns from the program to avoid being terminated for reasons of plagiarism, the student will be considered to have simultaneously resigned from the Graduate College.

Review Procedures for Suspension or Dismissal: Should a student who is suspended or dismissed (for reasons other than failing to meet the grade-point requirements given above) feel that such suspension or dismissal is unjust or discriminatory, the student may request that the case be reviewed in accordance with the following procedures.

1. The student should first discuss and attempt to resolve any grievance with the graduate program director.
2. Prior to the formal initiation of the suspension or dismissal review process, the student should discuss the grievance with the DEO in an attempt to resolve the grievance informally.
3. If the student continues to feel that suspension or dismissal is improper and the grievance cannot be resolved through the discussion provided for in one and two above, the student shall forward a written request for review of the suspension or dismissal to the DEO. The letter should outline the alleged grievance in reasonable detail.
4. The DEO shall designate a chair of a review committee that is appointed for the specific purpose of reviewing the grievance.
5. The review committee chair shall convene the committee as soon as possible. Normally, it is expected that the review process will be completed within two weeks of its formal initiation by the student.
6. The student requesting the review shall have the opportunity to discuss the grievance directly with the committee and provide any supporting material relevant to the review.
7. The review committee shall then determine what additional information or consultation is necessary to complete the review.
8. Upon review of relevant information, the review committee shall communicate their findings and recommendations in writing to the student and to the DEO. The committee's report should include major considerations in the decision.
9. The recommendations of the review committee shall represent final departmental action. Should the student still believe that the suspension or dismissal is unjust the student may request a review by the Graduate College in accordance with Section IV, paragraphs F and G, of the GCM.

Record of Disciplinary Action: Reports of student academic misconduct reside only in the Office of Academic Affairs and are destroyed when the student graduates, or after five years if the student has left the University or has not graduated. A notation of disciplinary action does not appear on a student's permanent record.

Further Information: If you have questions about the procedures described above, you may consult a program assistant in the Office of Academic Affairs, 205 Gilmore Hall (telephone 335-2144). If you are unsure about the proper use of sources or the extent to which collaboration on an assignment is permissible, talk to your instructor.

Student Complaints Concerning Faculty Actions

The procedures described below apply to complaints concerning any member of the teaching staff in the College of Liberal Arts and Sciences. Complaints may concern grading grievance, inequities in assignments, inappropriate course materials, inappropriate faculty conduct, or incompetency in oral communication.

1. You should first attempt to resolve the matter with the instructor.
2. If the complaint is not resolved to your satisfaction, you should go to the DEO or course supervisor.
3. If the matter remains unresolved, you may submit a written complaint to the Associate Dean for Academic Programs, Office of Academic Programs, 120 Schaeffer Hall. The Associate Dean will attempt to resolve the complaint and, if necessary, may convene a special committee to recommend appropriate action. In any event, the Associate Dean will respond to you in writing regarding the disposition of your complaint. For complaints involving the assignment of grades, it is College policy that grades cannot be changed without the permission of the department concerned.

If your complaint cannot be resolved through the mechanisms described above, you may file a formal complaint which will be handled under the procedures established for alleged violations of the statement on “Professional Ethics and Academic Responsibility” in the *University Operations Manual*. You may obtain a description of these formal procedures in the Office of Academic Programs, 120 Schaeffer Hall (telephone 335-2633).

The University has a policy on sexual harassment and consensual relationships in the instructional context. You may obtain the full text of the policy in the Office of Equal Opportunity and Diversity, 202 Jessup Hall (telephone 335-0705).

The Office of the University Ombudsperson (C108 Seashore Hall, telephone 335-3608) responds to problems and disputes brought forward by all members of the University community--students, staff, and faculty--that appear unresolvable through existing channels. Before consulting the ombudsperson, however, you normally should try to resolve problems by following the procedures described above.

If you have any questions about the procedures described above, you may consult a program assistant in the Office of Academic Programs, 120 Schaeffer Hall (telephone 335-2633).

Miscellaneous Information

Mail: The department receives a morning and noon campus mail delivery daily, Monday through Friday, which includes both intra-campus and federal mail. Students on appointment are provided mailboxes and are held responsible for checking them regularly. Personal mail should not be sent to your departmental

mail box.

Office Supplies and Services: Office supplies and services of the department staff are available only for departmental business. Supplies, such as stationary, paper, copying, etc., may not be utilized for personal use but may be used for matters directly related to instruction or research. An effort is made to provide typing and copy service for materials directly utilized in the instruction of students. Graduate assistants requiring such service should contact their immediate faculty supervisor, not a departmental secretary, about the service required. The supervisor will request that the work be done if, in his/her judgment it qualifies as departmental business.

Offices: Graduate assistants are entitled to an office (usually two or three assistants to an office) in the Field House if office space is available. Office assignments may be obtained from the department office. Persons occupying offices are responsible for keeping the offices in a presentable condition at all times. No telephones are located in these offices. In addition, study carrels in the Main Library are available to graduate students.

Keys: Each graduate assistant may obtain a Field House access card and an office key from the department office. These are to be checked in to the departmental secretary before the graduate assistant leaves the department. Keys are checked out only to persons on the University payroll; hence, graduate students who do not hold graduate appointments may not check out keys and are not assigned office space.

Parking: Parking at the University is extremely limited. A student parking sticker may be obtained during the registration period as part of the registration procedure. Such parking permits do not provide for parking in the lots adjacent to the Field House during working hours.

Teaching Assistant Training Workshops: Before the academic year begins, the University and the department conduct training workshops for graduate teaching assistants. Attendance at these workshops is mandatory.

Graduate Student Senate: A department member of the Graduate Student Senate is appointed annually at the beginning of the academic year by the DEO. If you are interested in serving in this capacity, contact the DEO or Graduate Program Director.

Student Membership on Department Committees: At the beginning of the academic year, the DEO may appoint graduate students to a one-year term on standing or ad-hoc department committees. If you are interested in serving in this capacity, contact the DEO or Graduate Program Director.

Human Subjects Review Committee: For any research involving human subjects, written approval from The University of Iowa Institutional Review Board for human subjects is first required in order to protect the rights and privacy of the subjects. Discuss these procedures with your program advisor or thesis chair during the early planning stages of such research. See <http://research.uiowa.edu/hso>.

General Principles Guiding Publication Credit: Journal articles submitted for publication that are based on

research primarily performed by a student (i.e., the student's thesis) will normally list the student as first author and the thesis chair or program advisor as second or last author. Whenever an authorship issue arises, the matter should be discussed fully among those involved and resolved, if necessary, with assistance from the DEO and the appropriate Dean.

Departmental and Tuition Scholarships

Louis E. Alley: Louis E. Alley served as chairman of the department from 1960-1978. He retired in 1983 and died in 1991. A memorial fund established by his family provides one annual Louis E. Alley Memorial Scholarship for a graduate student. Nominations for the award are made by the faculty.

Ray-Tai and Ray-Fong Chang: Ray-Tai Chang was a Ph.D. student in the department from 1988-1996. He worked in the area of thermoregulation under the direction of Professor Carl Gisolfi. Upon his graduation, he returned to Taiwan and became professor and chair of the Department of Physical Education at the National Kaohsiung Normal University in Taiwan from 2000 to 2003. In 2003, he established a scholarship fund for graduate students in appreciation of the opportunities provided to him and in recognition of his brother, Ray-Fong Chang, who made it possible for him to attend The University of Iowa. Nominations for the award are made by the faculty.

Carl V. Gisolfi: Carl V. Gisolfi was an exercise physiology professor in the department from 1969-2000. During his tenure, he established an Exercise Physiology Laboratory Fund in the Iowa Foundation. Dr. Gisolfi died in June 2000, and the remaining funds in the Iowa Foundation were converted to a scholarship fund for graduate students. Nominations for the award are made by the faculty.

C.H. McCloy: Charles H. McCloy was a professor in the department from 1930-1954. He was considered by many to be the most respected person internationally that American exercise science ever had. Upon his retirement in 1954, a C.H. McCloy Scholarship fund was established that provides scholarships for departmental graduate students. Nominations for the award are made by the faculty.

Tuition Scholarships: Graduate teaching and research assistants holding one-quarter-time or greater appointments will be assured a tuition scholarship that covers approximately the tuition costs for a 9 s.h. registration. The scholarship will be pro-rated, so that students who are registered for less than 9 s.h. will receive the appropriate percentage, according to the number of hours for which they are registered.

PART II: SPECIFIC INFORMATION

Specific Information relevant for all subtracks within the M.S. in HHP

Semester Hour Credits: Only level 3000 or higher courses are accepted towards the M.S. degree. Academic credit that carries a grade below “C-” or “I-incomplete”, or “W-withdrawn”, or “R-registered for zero credit” is not accepted toward the M.S. degree. Academic credit that carries the grade of “S or satisfactory” is only accepted in the cases outlined under “Course Loads and Grading Scales”.

Residence Requirements: At least 24 semester hours of graduate work must be completed in residence at this University for the M.S. degree, of which at least eight semester hours of on-campus credit is required. Credit for graduate courses taken at other institutions and transferred to this University and all correspondence course credit does not count as residence credit. After being admitted to the Graduate College, the student may complete graduate work off campus for residence credit (with the exception of the eight semester hours of on-campus credit mentioned above) under the circumstances listed under Extramural Registration in the GCM.

Time Limitations: Course credits for the M.S. degree dating back more than ten years from the semester in which the degree is to be conferred may not be applied toward the fulfillment of the M.S. degree requirements.

Advising: Graduate students pursuing the M.S. degree are advised by a departmental mentor. Students should arrange meetings with their mentor for the purpose of filing a Preliminary Plan of Study during the first academic session in which they are enrolled.

The student, in consultation with the mentor, lists on the preliminary plan of study (1) undergraduate prerequisites in which the student is deficient and (2) the graduate courses that the student must complete for the M.S. degree. The latter courses should include the courses necessary for the student to prepare for the final examination. The program advisor signs the approved preliminary plan of study, provides one copy to the student and places another copy in the student’s file in the department office.

Curriculum for MS in HHP – Clinical Exercise Physiology (CEP) Subtrack

The CEP subtrack within the MS in HHP is designed as a terminal Master's degree that will prepare students for professional employment by providing a solid academic education and specific skill sets in various areas related to clinical exercise physiology. In addition, internships in areas such as cardiac rehabilitation, pulmonary rehabilitation, diabetes prevention and management, noninvasive cardiovascular testing (e.g., exercise testing, echocardiography, Holter ECG), fitness evaluation, exercise prescription, health maintenance, health risk identification, and health education are an important component of the curriculum. As a terminal degree program, the CEP subtrack will be offered as an MS degree without thesis¹.

Some students in the CEP subtrack strive for professional certification from the American College of Sports Medicine (ACSM) in areas such as Certified Clinical Exercise Physiologist® (ACSM-CEP). A large variety of elective courses will provide students with flexibility to tailor their individual curriculum to best prepare them for their future career goals and areas of certification.

Most of the professional certifications require a certain number of hours of clinical/practical experience (e.g., Clinical Exercise Physiologist®: 600 hours) in cardiovascular, pulmonary, metabolic, orthopedic/musculoskeletal, neuromuscular, or immunological/hematological areas. The required Internship in CEP is included in the curriculum to help students cover a portion of this requirement. In addition, the Internship in CEP offers graduate students practical experiences that form a cornerstone of the curriculum of the CEP subtrack.

Prerequisites: Students entering the CEP subtrack within the MS in HHP must hold a BS or BA degree with a minimum GPA of 3.0. Courses in anatomy and physiology with laboratory sections are prerequisites for the CEP subtrack. Typically, this requirement is met by a total of 8 SH of anatomy and physiology (3 SH lecture and 1 SH laboratory component for anatomy and physiology, respectively).

Total SH Requirement: A minimum of 32 SH are required.

¹ In order to graduate with thesis, students will have to fulfill the additional requirements listed for the MS in HHP with thesis.

Required courses for MS Clinical Exercise Physiology subtrack: The following courses are required by all students (27 SH total).

Course #	Course Title	SH	Offered
Statistics		3	
One introductory Statistics** course such as:			
STAT:3510	Biostatistics	3	Fall/Spring
STAT:4143	Introduction to Statistical Methods	3	Fall/Spring
BIOS:4120	Introduction to Biostatistics	3	Fall/Spring
PCOL:5204	Basic Biostatistics & Experimental Design	1	Fall
**waived if taken as undergraduate (waiver needs approval by Director of Graduate Studies)			
Research Methods course		2	
HHP:6020	Research Methods and Ethics (register for 2 s.h. section)		
Core Courses		21	
HHP:4200	Metabolic Exercise Testing and Prescription	4	Fall/Spring
HHP:6410	Advanced Exercise Physiology	3	Fall
HHP:6460	Advanced Cardiovascular Physiology	3	Fall
HHP:6480	Advanced Human Pharmacology	3	Spring
HHP:6150	Advanced Clinical Exercise Physiology	3	Spring
HHP:4260	Advanced Respiratory Pathophysiology	3	Spring
HHP:6030	Physical Activity and Dietary Behavior Change	3	Spring
Internship (to be taken in year two of the program)		3	Arranged
HHP:4935	Clinical Exercise Physiology Internship		
Electives (to be taken in year two of the program)		6	Arranged
HHP:xxxx	(2) Electives (choose from options below)		

*Note students may elect to take a 2nd HHP:4935 internship in the Year 2 instead of a 2nd elective.

Elective Courses: Students select a minimum of two elective courses (6 s.h.) in consultation with their advisor/mentor. The following is a non-exclusive list of options for elective courses.

Course #	Course Title	SH	Offered
BIOL:3743	Basic Biology of Human Disease	2	Spring
HHP:3050	Obesity Causes, Consequences, Prevention & Treatment	3	Fall/Spring
HHP:3440	Physical Activity & Healthy Communities	3	Fall
HHP:3450	Immunology in Health and Disease	3	Fall
HHP:4020	Health Communication and Coaching Strategies	3	Fall/Spring
HHP:4320	Nutrition Interventions	3	Fall/Spring
HHP:4390	Understanding Human Disease	3	Fall/Spring
HHP:4400	Health Promotion Clinical Practicum	Arranged	Arranged
HHP:4405	Health Promotion Community and Worksite Practicum	Arranged	Arranged
HHP:4420	Planning and Evaluating Health Interventions	3	Spring

HHP:4450	Genetic Basis of Disease	3	Fall
HHP:6130	Advanced Skeletal Muscle Biology	3	Fall
HHP:6200	Advanced Metabolic Ex. Testing & Rx (recommended before internship)	1	Spring
HHP:6210	Epidemiology of Physical Activity	3	Fall
HHP:6300	Seminar in Motor Control	1	Fall/Spring
HHP:6400	Integrative Physiology seminar	1	Fall/Spring
HHP:6500	Seminar in Health Promotion	1	Spring
HHP:6470	Advanced Physiology of Aging	3	Spring
HHP:6510	Advanced Energy Metabolism in Health and Disease	3	Offered Spring
PSY:3010	Health Psychology	3	Fall/Spring
PSY:3340	Behavior Modification	3	Fall/Spring
ACB:5203	Gross Human Anatomy for Graduate Student	5	Fall/Summer
PTRS:7875	Analysis of Activity Based Plasticity	3	Fall
EPID:6350	Nutrition Epidemiology	2	Spring
EPID:6360	Nutrition Intervention Clinical Trials Research	2	Fall
EPID:6650	Cardiovascular Disease Epidemiology	3	Spring

Sample curriculum (plan of study needs to be approved by Director of Graduate Studies):

Fall 1st Year **7 s.h.**

HHP:4200 Metabolic Exercise Testing & Prescription, 4 s.h.
HHP:6460 Advanced Cardiovascular Physiology, 3 s.h.

Spring 1st Year **8 s.h.**

HHP:4260 Advanced Respiratory Pathophysiology, 3 sh
HHP:6150 Advanced Clinical Exercise Physiology 3 s.h.
HHP:6030 Physical Activity and Dietary Behavior Change, 3 s.h.

Summer 1st year

Students have the option to complete HHP:4935 Clinical Exercise Physiology Internship, 3

Fall 2nd Year **8 s.h.**

HHP 6020 Research Methods and Ethics, 2 s.h.
HHP:6410 Advanced Exercise Physiology, 3 s.h.
HHP:4935 Clinical Exercise Physiology Internship, 3 s.h.

Spring 2nd Year **9 s.h**

HHP:6480 Advanced Human Pharmacology, 3 s.h.
HHP:xxxx Elective, 3 s.h. (if Biostatistics course needed, take instead of elective)
HHP:xxxx Elective or HHP:4935 Clinical Exercise Physiology Internship, 3 s.h.

Final Examination Procedures for M.S. in HHP - CEP Subtrack

The final examination in the M.S. in HHP – CEP subtrack will take place during the final semester of the program. The exam will consist of a written exam in which the student will be asked questions from case

studies related to the concepts learned in the 7 core classes in the CEP program including:

- HHP:4200 Metabolic Exercise Testing & Prescription, 4 s.h.
- HHP:6410 Advanced Exercise Physiology, 3 s.h.
- HHP:6460 Advanced Cardiovascular Physiology, 3 s.h.
- HHP:6480 Advanced Human Pharmacology, 3 s.h.
- HHP:4260 Advanced Respiratory Pathophysiology, 3 sh
- HHP:6160 Advanced Exercise Electrocardiography 2 s.h.
- HHP:6030 Physical Activity and Dietary Behavior Change, 3 s.h.

The student is allowed to bring materials from classes (notes, books, etc.) to the exam but *not* allowed access to the internet (via phone, ipad, desktop or laptop computer, etc.) for any information. The CEP final examination will last between 4 and 6 hours on a single day, but no more than 6 hours.

Final Examination Committee: The final examination committee shall consist of at least three members of the graduate faculty, at least two of whom are from the major department or program, and are members of The University of Iowa tenure-track faculty.

Schedule: The exam date should be scheduled at least 2 weeks in advance with the Committee Chair and with the departmental administrative assistant/administrator. The exam should also be scheduled at least one week before the official Graduate College final examination reporting deadline (see academic calendar). A student must graduate within one calendar year after passing the final examination; failure to meet this deadline will require reexamination of the student. The final exam report must be submitted to the Graduate College within 5 business days of the exam.

Unsatisfactory Examination: The written examination will be evaluated by the members of the final examination committee as satisfactory or unsatisfactory, with two unsatisfactory votes making the committee report unsatisfactory. On the discretion of the examination committee, a candidate who fails the examination may present himself or herself for reexamination, but not sooner than the next regularly scheduled examination period in the following session. The examination may be repeated only once.

Instructions for Preparing Requests for the M.S. Degree: The Graduate College requires that the following information be submitted by the indicated Graduate College deadline for the session.

1. Request for Final Examination
 - a. names of committee members (indicate chair)
 - b. ranks of committee members
 - c. departments of committee members
 - d. date of final examination
 - e. time of final examination
2. Plan of Study Non-Doctoral Degree
3. Current registration information
4. Current transcript

Curriculum for MS in HHP – Athletic Training (AT) Subtrack

The Athletic Training (AT) subtrack within the MS in HHP is designed primarily as an advanced clinical education and research area of study for certified athletic trainers. Emphasis is on developing and applying a research and education base to the knowledge and skills of the entry-level athletic trainer. The program focuses on a health-care-team approach to sports medicine, medical care management, wellness, pediatric/adolescent health, and special health populations.

The AT subtrack is primarily designed as a terminal degree for athletic trainers. Emphasis is placed on the application of established research findings to the wide variety of problems encountered in everyday practice.

Prerequisites: Students entering the AT subtrack within the MS in HHP must hold a BS or BA degree with a minimum GPA of 3.0. In addition, the following undergraduate courses and certifications are prerequisites for the AT subtrack:

<u>Undergraduate courses/Certifications</u>	<u>SH</u>
Anatomy	3-4
Human Physiology	3
Athletic Training Core	
Prevention	3
Evaluation and Recognition	3
Modalities	3
Rehabilitation	3
Administration	2
Exercise Science Core	
Exercise Physiology	3
Biomechanics	3
Current Emergency Certification	
Certification by the Board of Certification (BOC) and state license	

Total SH Requirement: A minimum of 30 SH are required.

Required Courses: At least 20 SH must be obtained in the HHP Department (HHP department course code) as listed below:

Course #	Course Title	SH	Offered
Exercise Science Core (any three of the following 13 courses)			
HHP:3110	Advanced Anatomy Laboratory	3	Fall/Spring
HHP:4010	Behavioral and Clinical Health Assessment	3	Fall
HHP:4220	Biomechanics of Human Motion	3	Fall/Spring
HHP:4310	Sport and Exercise Nutrition	3	Fall/Spring
HHP:4440	Physiology of Nutrition	3	Fall/Spring
HHP:4450	Genetic Basis of Disease	3	Fall
HHP:4470	Physiology of Aging	3	Spring
HHP:4260	Advanced Respiratory Pathophysiology	3	Spring
HHP:6130	Advanced Skeletal Muscle Physiology	3	Fall
HHP:6150	Advanced Clinical Exercise Physiology	3	Spring
HHP:6410	Advanced Exercise Physiology	3	Fall
HHP:6460	Advanced Cardiovascular Physiology	3	Fall
HHP:6480	Advanced Human Pharmacology	3	Spring
HHP:6510	Advanced Energy Metabolism in Health and Disease	3	Spring
Clinical Research Tools (one course)			
	One approved clinical tool concentration in computer science, epidemiology, pathology, counseling, public health, or health promotion/leisure studies	2-4	
Athletic Training Core (four courses)			
HHP:5000	Problems (repeated)	8	Fall/Spring
HHP:7000	Practicum in College Teaching	3	Fall/Spring
HHP:6010	Non-thesis Seminar	2	Fall/Spring
EPID:4400	Epidemiology I: Principles	3	Fall/Spring
	or		
PSQF:6205	Design of Instruction	3	Fall/Spring
	or		
PATH:8133	Introduction to Human Pathology Graduate Student	4	Fall

Recommended Elective Courses: Elective courses should be used to enhance the student's concentration in medical care management, wellness, pediatric/adolescent health, and special health populations. The student's advisor will approve all such courses.

Final Examination Procedures for M.S. in HHP – AT Subtrack

The final examination for the M.S. degree without thesis must be taken during the semester in which the student intends to graduate. Approval of the final examination topic and proposal must take place in the preceding semester. Application to take the final examination must be filed with the Graduate College by the deadline for that semester. The application originates in the departmental office and includes a final plan of study indicating all courses completed, or to be completed, for the degree. The advisor and student are responsible for developing the plan of study. The final examination must be initiated no later than six weeks prior to the end of the semester.

Format of the Final Examination: The final examination for the M.S. without thesis may consist of an examination over a brief (< 20 double spaced pages) document that can have the form of a research paper, a clinical review, a case report, or a similar type of document produced by the student. The format of the paper is to be consistent with the publication style of a journal in the field of specialization (e.g., J. Appl. Physiol.). The final examination will be scheduled two weeks after submission of the paper.

During the final examination, questions may be posed that relate specifically to the material written by the student. These are usually questions related to the student's approach to the problem, depth of information presented, interpretation of findings, and background review material. Additional questions may arise from basic concepts related to the topic but not directly addressed in the paper. In addition to questions, committee suggestions for re-writing and editing may be raised during the final examination period. Such comments are intended to aid the student in demonstrating their scholarly abilities and level of achievement as well as to help in reorganizing the paper for publication.

If the Final Examination is based on a written non-thesis document, this document usually consists of the following sections and subsections: (1) title page; (2) abstract; (3) introduction including one or more research questions and rationale; (4) summarized and referenced review of related literature making liberal use of headings and subheadings and developing an introduction and brief summary for each heading; (5) conclusions or recommendations pertinent to the specific question or questions proposed; (6) references used within the text of the article presented consecutively in the order in which they were cited; and (7) figures or tables that enhance the understanding of the text. The length of the paper is limited to 20 double-spaced pages (minimum font size 10 point) including references, figures and tables.

If the Chair of the Final Examination Committee chooses a format for the Final Examination different from a Final Examination based on a written document, the specific format will be explained to the student in a timely manner before the Final Examination.

Should the Final Examination not meet expectations for the M.S. degree without thesis, the student will be required to reschedule a second examination on advice from the advisor. Failure to meet the Graduate College deadline or failure to meet expectations of the final examination at the second committee review will constitute failure of the final examination. Failure to demonstrate a basic grasp of the research materials, failure to write effectively, and failure to effectively synthesize and evaluate the pertinent literature in a basic and meaningful way, will constitute grounds for failure of the final examination.

A failure of the final examination requires that the student wait until the next semester to register for a second final examination. In such cases, the same written project may serve as the topic of examination if recommended by the committee. Failure of the second examination will terminate the student's candidacy for the M.S. non-thesis degree.

Instructions for Preparing Requests for the M.S. Degree: The Graduate College requires that the following information be submitted by the indicated Graduate College deadline for the session.

5. Request for Final Examination
 - a. names of committee members (indicate chair)
 - b. ranks of committee members
 - c. departments of committee members
 - d. date of final examination
 - e. time of final examination
6. Plan of Study Non-Doctoral Degree
7. Current registration information
8. Current transcript

Curriculum for MS in HHP with Thesis

The MS in HHP with thesis is designed to academically prepare students with a Bachelor's degree for doctoral programs in the broad areas of *health promotion* and *human physiology*. In addition, it can be used to prepare students for leadership positions in industry and government where research and evaluation skills are critical.

Health promotion is defined by the World Health Organization as the process of enabling people to increase control over, and to improve, their health. Health promotion is distinguished by its focus on physiological and behavioral processes as they interact with social and cultural forces to impact health. Scholarship in health promotion at the University of Iowa advances the current understanding of physical activity, sedentary behavior, diet, and sleep in relation to health outcomes, the evaluation of theories that predict behavior, analytical modeling of behavioral patterns associated with health outcomes, and the testing of interventions that promote health and improve quality of life.

Human physiology is the study of how the human body responds to external and internal stimuli, including physical exercise and stress, environmental conditions, aging, and disease. Scholarship in this area requires in-depth knowledge in the natural sciences, including biology, chemistry, biochemistry, biomechanics, mathematics and statistics, physics, anatomy, biomechanics, neuroscience, and physiology. Students with a special interest in the area of human physiology will acquire knowledge of the interrelated functions of human organ systems and gain hands-on skills in experimental techniques in the areas of biomechanics, cardiovascular physiology, and/or exercise physiology using human subjects, experimental animals, isolated tissues, or cell culture systems.

Prerequisite Coursework: Students entering the MS in HHP with thesis must hold a BS/BA degree with a minimum GPA of 3.0.

Total Semester Hour Requirements: 30 semester hours of graduate coursework which includes a maximum of 4 semester hours of Thesis MS (27:404).

Required courses: All graduate students in the MS in HHP with thesis are required to take the coursework in the following areas. Requirements can be waived if equivalent coursework was taken previously, but must be approved by the Director of Graduate Studies in writing.

Course #	Course Title	SH	Offered
Health Promotion/Physiology Core Courses		6	
A minimum of one course in both areas (3 SH each) is required. Specific courses are selected in consultation with mentor and the Director of Graduate Studies.			
Examples are:			
HHP:3200	Health Behavior and Health Promotion	3	Fall
HHP:3500	Human Physiology	3	Fall/Spring
Statistics (1 introductory and 1 advanced course)		6	
Suggested introductory courses:			
STAT:3510	Biostatistics	3	Fall/Spring
STAT:4143	Introduction to Statistical Methods	3	Fall/Spring
BIOS:4120	Introduction to Biostatistics	3	Fall/Spring
PCOL:5204	Basic Biostatistics & Experimental Design	1	Fall
Suggested advanced courses:			
BIOS:5120	Regression & ANOVA in Health Sciences	3	Spring
STAT:6513	Intermediate Statistical Methods	4	Fall/Spring
Research Methods		3	
HHP:6020	Research Methods and Ethics	3	Fall
Graduate Seminar Courses (2 enrollments at 1 SH) selected from:		2	
HHP:6400	Integrative Physiology Seminar	1	Fall/Spring
HHP:6300	Seminar in Motor Control	1	Fall/Spring
HHP:6500	Seminar in Health Promotion	1	Spring
Thesis		2-4	
HHP:7500	Thesis MS	maximum of 4 SH	Fall/Spring

Elective courses: Elective courses serve the purpose to broaden the student's knowledge in the general area of HHP and to enhancing the student's knowledge in the special area of interest. Elective courses will be selected with guidance from the advisor/mentor. Examples of elective courses include:

Course #	Course Title	SH	Offered
HHP:4010	Behavioral & Clinical Health Assessment	3	Fall
HHP:4020	Health Communication & Coaching	3	Fall/Spring
HHP:4320	Nutrition Interventions	3	Spring
HHP:4420	Planning/Evaluating Health Interventions	3	Spring
HHP:4260	Advanced Respiratory Pathophysiology	3	Spring
HHP:6130	Advanced Skeletal Muscle Physiology	3	Spring
HHP:6150	Advanced Clinical Exercise Physiology	3	Spring
HHP:6200	Advanced Metabolic Exercise Testing and Prescription	4	Fall
HHP:6210	Epidemiology of Physical Activity	3	Fall
HHP:6410	Advanced Exercise Physiology	3	Fall
HHP:6460	Advanced Cardiovascular Physiology	3	Fall
HHP:6470	Advanced Physiology of Aging	3	Fall
HHP:6480	Advanced Human Pharmacology	3	Spring
HHP:6510	Advanced Energy Metabolism in Health and Disease	3	Spring
ACB:5203	Gross Human Anatomy for Graduate Student	5	Summer/Fall
MPB:5153	Graduate Physiology	4	Fall
BIOC:3110	Biochemistry	3	Fall/Spring
PTRS:7812	Biomedical Instrumentation & Measurement	3	Fall
PTRS:7875	Analysis of Activity Based Plasticity	3	Fall
EPID:6350	Nutrition Epidemiology	2	Spring

Research and Practicum experiences are also available for SH credit. Examples are:

Course #	Course Title	SH	Offered
HHP:4400	Health Promotion Clinical Practicum	1	arranged
HHP:4405	Health Promotion Community and Worksite Practicum	arranged	arranged
HHP:5000	Problems	arranged	arranged
HHP:6000	Research	arranged	arranged

Thesis and Final Examination Procedures for M.S. in HHP with thesis

For the M.S. with thesis candidate, the oral examination over the thesis (defense) constitutes the final examination.

Although M.S. theses are independent research projects initiated and conducted by candidates for graduate degree, considerable guidance and assistance in selecting and defining appropriate topics, collecting and analyzing data, and writing theses in acceptable form are provided by the program advisor and members of the thesis committee. The thesis chair will guide and assist the candidate throughout the project.

Under the supervision of the thesis chair, the student prepares a prospectus for presentation to the thesis committee. The prospectus includes a brief preliminary statement of the proposed problem; a list of sources, indexes and data bases searched in locating studies related to the proposed problem; descriptions of the studies found that are related to the proposed problem; an outline of the proposed procedure for collecting the data; an outline of the proposed method of analyzing the data; and a list of references.

Upon approval of the proposed topic by the chair, the student presents the thesis prospectus to the thesis committee for approval. On receiving such approval, the student registers for 27:404 Thesis (maximum of 4 s.h. of credit) and proceeds to collect and analyze the data and, subsequently, to write the thesis under the guidance of the thesis chair.

In writing the thesis, the student should follow the guidelines recommended by the thesis chair and approved by the Graduate College.

The student deposits the thesis in completed form with the Graduate College by the published deadline for preliminary checking (four weeks before final exams begin). When the preliminary check has been accomplished, the student (1) distributes copies of the thesis to the thesis committee; (2) takes the final examination over the thesis; (3) makes any corrections or changes required by the thesis chair, thesis committee or the Graduate College; and (4) deposits two unbound copies of the thesis in final form with the Graduate College. The candidate also pays a fee to the departmental office for the binding of one copy of the thesis for the thesis chair and one copy for the department thesis library.

Costs for Preparing the Thesis: All costs related to producing the thesis document, including binding, are the responsibility of the degree candidate.

Ultimate Responsibility for Thesis: Although the thesis chair and the thesis committee members give the student advice and guidance as deemed appropriate, the responsibility for the scholarship evidenced by the thesis lies with the student. Theses that do not show high levels of scholarship are not accepted by examining committees at the final examination.

Final Examination: It is the responsibility of the student to initiate the procedures that terminate in the final examination. The student must (1) file an Application for Degree in the Office of the Registrar by the published deadline (approximately at midterm); and (2) at the same time, place on record in the department

office the intention to graduate.

The final examination for a student who has written an M.S. thesis consists of an oral examination over the thesis and whatever related topics that committee members deem appropriate. The examination is conducted by a committee recommended by the DEO in consultation with the program advisor and approved by the Dean of the Graduate College. The committee must consist of at least three members. Two of the three members must be from within the Department of Health and Human Physiology. The purposes of the thesis, the methods used in accomplishing these purposes, the means used to analyze the data, and the conclusions reached are subject to critical inquiry by the committee. Further, the knowledge of the candidate concerning the areas that constitute the immediate context of the thesis is also legitimate subjects for committee inquiry.

Two unsatisfactory votes by members of the examining committee result in a committee report of unsatisfactory. Upon the recommendation of the examining committee, the candidate who fails the examination may attempt the examination a second time in the following session after the first attempt. The final examination may be repeated only once.

Instruction for Preparing Requests for the M.S. Degree with Thesis: The Graduate College requires that the following information be submitted by the indicated Graduate College deadline; or, if the final examination is taken before the deadline, sent immediately:

1. Request for final examination
 - a. names of committee members (indicate chair)
 - b. ranks of committee members
 - c. departments of committee members
 - d. date of final examination
 - e. time of defense
 - f. place of defense
2. Plan of Study Non-Doctoral Degree
3. Current registration information
4. Current transcript

If the candidate is unable to meet deadlines, the request is canceled and a new request for final examination is prepared and submitted again during the semester the student intends to graduate.

Electronic Submission of Thesis: All doctoral dissertations and master's theses, excluding MFA theses, must be submitted to the Graduate College in electronic format. Information on electronic submission is available at: <http://www.grad.uiowa.edu/theses-and-dissertations>.

Curriculum for MS in HHP – Child Life (CL) Subtrack

The CL subtrack is primarily designed as a terminal degree for Child Life Specialists. Emphasis is placed on the application of evidence-based practice and clinical experience in a variety of settings. As a terminal degree program, the CL subtrack will be offered as an MS degree without thesis.

Pre-requisites and admission requirements: An undergraduate GPA of 3.00 or higher is required for admission. Admission pre-requisites include: 1) Completion of pre-requisite coursework including: One course each in Human Anatomy, Medical Terminology, and Growth and Development, 2) An additional strongly recommended pre-requisite is an introductory level course in CL, 3) Verification of 100 hours of paid or volunteer experience in CL or in a pediatric setting, 4) Three letters of recommendation, with at least one preferred from a credentialed CL Specialist. Students who have not completed an introductory course in child life must audit Introduction to Child Life (TR:1077) during their first semester. International applicants whose first language is not English must meet the English Proficiency Requirements as specified by the Graduate College (<http://grad.admissions.uiowa.edu/graduate-programs/english-requirements-admission-graduate-college>).

Course #	Course Title	SH	Offered
Core			
PSQF:4143	Introduction to Statistical Methods	3	Fall/Spring
TR:5205	Research Methods and Leisure Behavior	3	Spring
TR:5211	Ethics and Practice in Pediatrics	3	Fall
CL Subprogram			
TR:5165	Child Life: Methods and Materials	3	Fall
TR:5166	Child Life: Seminar	3	Spring
TR:5260	Play and Childhood	3	Fall
TR:5167	Child Life Practicum	3	Spring
SSW:3786	Death and Dying	3	Fall/Spring
EDTL:3114	Parent Child Relations	3	Fall/Spring
Internship			
TR:4192	Child Life Internship	9	Spring/Sum

Final Examination Procedures for M.S. in HHP – CL Subtrack

The final examination for the M.S. degree without thesis must be taken during the semester in which the student intends to graduate (typically spring semester). Application to take the final examination must be filed with the Graduate College by the deadline for that semester. The application originates in the departmental office and includes a final plan of study indicating all courses completed, or to be completed, for the degree. The advisor and student are responsible for developing the plan of study.

Format of the Final Examination: The final examination for the CL subtrack consists of examination in three areas: Research, CL Practice and Ethics and Professional Issues. The final examination is four hours with students allocating about one hour per topic with an additional hour to organize their answers. Laptop computers are allowed for the examination.

Should the Final Examination not meet expectations for the M.S. degree without thesis, the student will be required to reschedule a second examination on advice from the advisor. Failure to meet the Graduate College deadline or failure to meet expectations of the final examination at the second committee review will constitute failure of the final examination. Failure to demonstrate a basic grasp of the research materials, failure to write effectively, and failure to effectively synthesize and evaluate the pertinent literature in a basic and meaningful way, will constitute grounds for failure of the final examination.

A failure of the final examination requires that the student wait until the next semester to register for a second final examination. In such cases, the same written project may serve as the topic of examination if recommended by the committee. Failure of the second examination will terminate the student's candidacy for the M.S. non-thesis degree.

Instructions for Preparing Requests for the M.S. Degree: The Graduate College requires that the following information be submitted by the indicated Graduate College deadline for the session.

1. Request for Final Examination
 - a. names of committee members (indicate chair)
 - b. ranks of committee members
 - c. departments of committee members
 - d. date of final examination
 - e. time of final examination
2. Plan of Study Non-Doctoral Degree
3. Current registration information
4. Current transcript

PART III: CHANGES IN DEGREE REQUIREMENTS OR DEGREE OBJECTIVES

Changes in Degree Requirements

Should the department's requirements for the M.S. degree program change after a student has filed a preliminary plan of study with the department, but before the student receives the degree, the student may choose to graduate under either the original requirements listed on the preliminary plan of study or under the new requirements created by the change.

Changes in Degree Objectives

From M.S. without Thesis to M.S. with Thesis: Because the degree programs for the M.S. without thesis (AT or CEP subtrack) is designed as a terminal program of study, whereas the degree program for the M.S. with thesis is designed as the first step in a study program leading to the Ph.D. degree, changes from the former to the latter are exceedingly rare. However, such changes may be made with the approval of the DEO in consultation with the mentor. Students making such changes should expect to spend additional time for writing the M.S. thesis document and in obtaining the M.S. degree.

From M.S. with Thesis to M.S. without Thesis: With the approval of the DEO in consultation with the mentor, a student may change from the M.S. degree program with thesis to the M.S. degree program without thesis (AT or CEP subtrack). Such a change requires that the student complete an acceptable non-thesis paper in addition to those courses normally required for successful completion of the respective subtrack with the M.S. without thesis.

From M.S. to Ph.D.: Students who receive the M.S. degree with thesis from this department are normally encouraged to continue on toward the Ph.D. degree if they choose to do so. Such students should obtain from the Graduate College a form, "Request for Change of Graduate College Status," and submit it to the mentor and DEO for the required signatures.

Under unusual circumstances, students who receive the M.S. degree without thesis may be permitted to pursue the Ph.D. degree with the approval of the DEO in consultation with faculty members in the program area in which the student wishes to specialize.