DOCTORAL STUDENT HANDBOOK

2010-2011

MU Informatics Institute (MUII)
University of Missouri

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University of Missouri
Informatics Institute

MUII Doctoral Student Handbook
2010-2011

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INTRODUCTION

This document is provided to help you better understand the Ph.D. degree program procedures and requirements of the University of Missouri Informatics Institute (MUII), as well as general information that should be useful to you as a graduate student. Included within is important information pertaining to University and program policies, financial and support services, and other vital information. **It is your responsibility to read and familiarize yourself with the material contained in this manual.**

Although every effort has been made to ensure up-to-date accuracy of the information contained within, many policies outside of this doctoral program are subject to change without notice. Information contained in this manual should be considered supplementary to existing University policies and is subject to supersession at any time by any and all applicable rules, regulations, and policies outlined by the University System, MU Graduate School, and the sponsoring academic units, where and/or when applicable.

If you believe this document contains any errors or inaccuracies, please notify MUII staff.

INSTITUTE DIRECTORY

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Administrative Staff
241 EBW
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An up-to-date faculty directory can be accessed from MUII's website (http://muii.missouri.edu).

POLICY UPDATES

MUII presents new updates of this handbook during the first institutional seminar (INFO INST 8087) each fall semester. An electronic copy of this handbook will be provided to all students prior to the first seminar.

Students should contact MUII staff and work with their advisor, if identified, to be assigned office space in their advisors' laboratories or home departments. Students who have not selected an advisor will be assigned space in either Engineering Building West (EBW), the Clinical Support & Education (CS&E) building, or Christopher S. Bond Life Sciences Center.

New MUII students who need to register for problems (INFO INST 8085), lab rotations (INFO INST 8088), and research credit hours (INFO INST 8090) should contact the MUII staff in 241 EBW for consent numbers.

LAPTOP COMPUTER LOAN PROGRAM

When funding is available, all incoming MUII students will be provided with a laptop computer upon successful completion of the New Student Orientation. Incoming MUII students from both the bioinformatics and the health informatics emphasis areas will complete the Laptop Computer Loan form (see Appendix 1) and must follow all University of Missouri IT policies and procedures.[1] Failure to return the assigned laptop computer as agreed ensures the student will not be allowed to graduate, and a hold will be placed on all transcripts. Each computer will have a maintenance and service warranty to ensure the student access to the most up-to-date software necessary for conducting university research.

Once the laptop is received and verified to be in excellent working order, students should complete the Server Account and Storage Application form (see Appendix 2) as soon as possible to be assigned back-up storage space and a computational environment on the MUII servers.

HUMAN SUBJECTS RESEARCH

The MUII Ph.D. program is research-oriented. Please note that any research involving human subjects is regulated by federal law. Legal requirements to protect human subjects apply to a broader range of research than many investigators realize. University policy requires that all researchers involved in human/animal subjects research be certified by the Campus Institutional Review Board (IRB), and in some cases the Health Sciences Institutional Review Board (HSIRB). Specific research projects must also be IRB approved before data collection can begin.

For more information about IRB certification training, login at the following web site using your University System pawprint: https://irb.missouri.edu/eirb/gen4/User/Login/. IRB certification and approval can both be obtained there online. MUII doctoral students are required to obtain an IRB training certificate (IRB or HSIRB) by the end of their first semester. Student research might require other compliance training, such as Health Insurance Portability and Accountability Act (HIPAA).

Students unsure of whether they should comply with IRB or HSIRB policy should visit the following web site for information about choosing the right IRB: http://research.missouri.edu/complia/choose.htm.

ACADEMIC INTEGRITY

What is Academic Integrity?

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[1] http://doit.missouri.edu/about/policies/

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The Office of Student Rights & Responsibilities[2] states:

Academic integrity is the core set of values and principles that underwrites the very mission of the University itself: integrity, honesty, hard work, and the determination to translate personal and professional principles into behavior. It is a reflection of the students' experience here at Mizzou and is a measure of the very worth of their degree.

- For students, this ethic lies at the heart of the value of their degree. If they, or others around them, are not living up to a high standard of academic integrity, the worth of the education they are receiving (and the degree they will receive) is compromised.

- For faculty, a high standard of academic integrity will ultimately lead to greater heights of academic rigor and freedom among students, a better reputation for MU, and more positive patterns of interaction with the student population. We can generate a long-lasting academic focus among the faculty population that migrates to MU and the student population that passes through Mizzou.

Article VI of the Faculty handbook[3] states:

Academic dishonesty refers to any act that is intended to produce an academic assessment that is not commensurate with an individual's performance, or any act that is intended to unfairly assist or hinder an individual's academic efforts. Such acts include, but are not limited to, the following:

- Allowing the work of one person to be academically assessed as the work of another.

- Allowing academic credit to be assigned to work that was not performed.

- Unauthorized possession of resources (e.g., reserved library material, laboratory material, art work, computer software, or medical excuses).

- Misrepresentation of an academic record (e.g., changing grades, failure to report work done at other institutions).

- Denial of access to resources (e.g., reserved library material, laboratory material, art work, computer software) intended to be available to others.

All University System rules and regulations, including more information about academic honesty, can be found at the following web site: http://www.umsystem.edu/ums/departments/gc/rules/programs/.

Academic Honesty at MUII

MUII is committed to the highest standards of academic and professional ethics, including academic honesty. MUII students are expected to adhere to standards outlined by the University System. A charge of academic dishonesty is serious and can have serious consequences if guilt is established. Discipline ranges from a warning to expulsion from the University, and students may receive a failing grade for the course or assignment in question.

STUDENT PRIVACY/FERPA

Student Privacy and FERPA

FERPA is an acronym for *Family Education Rights and Privacy Act*. The act is a "*federal law designed to protect the privacy of educational records, to establish the rights of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings.*" For more information on FERPA, please see: http://www.umsystem.edu/ums/departments/gc/rules/information/180/020.shtml and/or http://registrar.missouri.edu/policies/index.php.

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[2] http://osrr.missouri.edu/about/index.html
[3] http://facultycouncil.missouri.edu/handbook/article-6.html

STATEMENT OF NONDISCRIMINATION

In compliance with University of Missouri policy and the Americans with Disabilities Act (ADA), MUII does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, age, disability or status as a protected veteran.

For more information about student rights under the University System and ADA, please visit the following websites: http://ada.missouri.edu/ and/or http://www.missouri.edu/eeo-aa.php.

COUNSELING CENTER

Counseling Services are confidential.

The Counseling Center assists students in learning to cope with emotional, social, and academic concerns interfering with their success while at MU.

Any undergraduate or graduate student currently enrolled at the MU campus is eligible for up to 12 sessions per academic year of individual or couples counseling. There are no session limits for group therapy. If a student is interested in couples counseling, his/her partner does not have to be a student. Students must be enrolled in the term during which they seek services. Consultation and outreach services are available for students, faculty, and staff.

Scheduling

The initial assessment appointment is scheduled by calling, 882-6601 or coming in to the Counseling Center at 119 Parker Hall. If your situation is an emergency, you may request to be seen immediately. For further information, please see the website listed below: **http://counseling.missouri.edu/student-services/index.php**.

GRADUATE DEGREES IN INFORMATICS

Ph.D. in Informatics with Emphasis Areas in Bioinformatics or Health Informatics

The following is a general description of the Ph.D. degree program and its emphasis areas in bioinformatics and health informatics offered by the University of Missouri Informatics Institute (MUII). Admission and graduation requirements are disclosed.

Each student is responsible for submitting his/her doctoral forms by the deadlines indicated. The Graduate School website, which contains the timeline for submission of doctoral forms and other degree information, is located at this link: http://gradschool.missouri.edu/policies/doctoral/requirements/.

Students are strongly encouraged to meet with their dissertation committees at least annually— and preferably more frequently. For more details regarding forming a doctoral dissertation committee, please refer to the Graduate School website: http://gradschool.missouri.edu/policies/doctoral/requirements/committee.php.

Reasonable Rate of Progress

Reasonable rate of progress is governed by both the campus-wide policies of the Graduate School listed below as well as academic program regulations, which may be more restrictive. Failure to satisfy the Graduate School's rate of progress policies leading to dismissal are handled by the Request for Extension process (http://gradschool.missouri.edu/policies/progress/extension-appeal.php), and the decision of the vice provost for advanced studies and dean of the Graduate School in these matters is binding.

For academic advice or assistance with degree program planning, students should contact their advisors.

Academic Performance

If a student follows the Institute's timeline, he or she should be able to finish with a Ph.D. degree in three (3) or more years (with a relevant prior MS degree) or in four (4) or more years (without a relevant prior MS degree). A "reasonable rate of progress" is defined as successfully completing each degree requirement by the timeframe outlined below for the degree program. Failure to comply with these requirements may result in dismissal from the program.

A. **Academic Satisfactory Progress:** MUII expects students to remain in good academic standing (GPA ≥ 3.0, with no grade lower than a C in any class), make sufficient progress towards a graduate degree, and comply with all Institute, Graduate School, and University rules, regulations, requirements, etc.

B. **Satisfactory Progress in Teaching and Research:** MUII encourages students to obtain teaching experience from the Institute's service courses or their advisor's home department. Alternative teaching experience options could include guest lecturing, presenting at a conference, pursuing an academic minor in college teaching, or attending "Preparing Future Faculty" seminars.

   MUII expects all students to actively engage in research and meet the expectations set forth by their research advisors. To show research progress, students are expected to work toward presenting their informatics research at conferences and publishing in peer-reviewed journals.

C. **Professional Development:** To provide well-rounded training, the Institute offers many opportunities for professional service and activities. Students are strongly encouraged to participate in the MUII Graduate Student Association (MUIIGSA), Life Sciences Week, Health Sciences Week, and professional organizations. Check the MUII website (http://muii.missouri.edu/) for professional organizations and activity updates.

D. All students will be evaluated annually, using the Graduate School's Graduate Student Progress System (GSPS), which can be viewed at https://gradschool.missouri.edu/policies/progress/annual-review/progress-system/index.php.   Student self-assessment reports will be completed by May 1 of each year. Research advisor evaluations will be completed and released to the student by May 31. If a student fails to complete a GSPS report by May 1, the student will lose the privileges for financial support, travel funds, and all award nominations through MUII. The Directors of Graduate Studies will review all evaluations by June 30. Students not making satisfactory progress will be notified in writing by MUII Director after their annual evaluation, and may be dismissed from the program.

E. In GSPS, students are required to enter data in the following categories (use NA if a particular category is not applicable): Basic Information, Degree Program, Advisors, Required Forms, Progress Report, Teaching Report, Activity Checklist, Awards, Presentations, Publications, Placement (when graduating), Conference Travel, Service Activities, Student Organizations, and Employment.

F. In the event of an unsatisfactory performance review, financial support may be terminated. The student will be notified in writing of the decision. For appeals, the guidelines outlined on the Graduate School's website (http://gradschool.missouri.edu/) should be followed.

Request for Extension and Appeals

Dismissals arising from violation of academic program policies may be appealed using the Appeals Process (http://gradschool.missouri.edu/policies/progress/extension-appeal.php). Students should also refer to the section on the Dismissal Policy (http://gradschool.missouri.edu/policies/progress/probation-dismissal.php) for additional details.

Doctoral Degree Requirements

Students must complete the following requirements in order to earn their respective graduate degrees with an emphasis in Bioinformatics or Health Informatics. The following is a brief synopsis of the general degree requirements. There are some variations, depending on the emphasis area; please see the

Informatics Institute Web site (http://muii.missouri.edu) for complete details. Students are encouraged to work with their dissertation committees to survey the availability of all committee members prior to sending requests for examinations to the Institute. All examination scheduling will be made by the MUII office.

Qualifying Examination (QE)
(http://gradschool.missouri.edu/policies/doctoral/requirements/qualifying-examination.php)

The qualifying examination (QE) is committee-based. Prior to taking the QE, the student should select an advisor and form a dissertation committee. The Committee will consist of the MUII student's advisor as committee chair, and at least three (3) other faculty members, one to be outside MUII. The advisor and two (2) other committee members must be in the MUII Core Faculty body (see Core Faculty listing at MUII website at http://muii.missouri.edu). The outside committee member should be faculty from an experiential area closely related to the student's research project, such as a plant researcher for bioinformatics students working on plant genomics, or a radiologist for health informatics students working on imaging informatics. Membership requirements for the dissertation committee are listed at: http://gradschool.missouri.edu/policies/doctoral/requirements/committee.php.

The student is expected to take the QE by the end of the third academic semester. The student must provide the completed request form (see Appendix 3) to the MUII office at MUIIGraduateProgram@missouri.edu to schedule the QE at least two weeks prior to the planned examination date. The advisor will work with committee members and MUII office to schedule the examination date. If there is a significant delay, the student will resubmit the request with the committee's consent. The request form must have the following parts: (1) summary of course work and a draft of D-2 form (Doctoral Plan of Study), and (2) a 1-page research statement. The MUII office will forward the approved application to the advisor, the appropriate DGS, and committee members within three business days after submission.

Coursework: The committee will obtain comments from course instructors and evaluate the quality of coursework based on grades received and instructor's comments.

Oral examination: The committee will prepare QE questions based on the 1-page research statement submitted by the student. The scope of the questions may be directly or indirectly related to the topics listed in the statement. This examination is intended to evaluate breadth and depth of the understanding the student has of fundamental informatics problems and potential solutions. The length of the exam shall not exceed two hours, and is closed to the public.

Outcomes: The student will receive one of the following three possible results for the QE immediately following completion of the examination: pass, conditional pass, or fail. If the student fails the exam twice, the student will be dismissed from the program.

Outcome 1 – Pass: The student and MUII office (MUIIGraduateProgram@missouri.edu) will receive a written report by the committee, addressing the committee's concerns, if any, and an explanation of identified strengths and/or weaknesses of the answers expressed within one week of completion of the QE. Upon successfully passing the QE, the advisor must submit the Qualifying Examination Results and Doctoral Committee Approval Form (D-1 Form), found at http://gradschool.missouri.edu/policies/doctoral/requirements/d1.pdf, to MUII within one week of the examination date. The student and advisor will receive a confirmation e-mail from MUII when the form has been submitted to the Graduate School.

Outcome 2 – Conditional Pass: The committee has concerns, but believes the student can overcome the reasons for the concerns through one or more of the following activities: by reading additional papers/books, taking additional courses, and/or other actions identified by the committee for further improvement. A written report with clear action and assessment plans for the student will be sent to the student and MUII office (MUIIGraduateProgram@missouri.edu) within one week following the QE. The student must fulfill the requirements according to the action plan provided by the committee within the timeframe specified in the action plan to remain in good standing.

Outcome 3 – Failed: The student did not meet the committee's minimal standard regarding qualifications to undertake studies at the Ph.D. level. A written report with clear action and assessment plans for the student will be sent to the student and MUII office (MUIIGraduateProgram@missouri.edu) within one week following the QE. The student will have one opportunity to retake the examination, and this retake must be within six months of the original examination date.

If the student cannot meet the timelines for Outcomes 2 or 3, the student will need to seek an exception in writing. Exceptions will only be made for catastrophic personal circumstances. The Graduate Program Committee (http://muii.missouri.edu/index.php?pid=28) will be the final arbiter of the exception. Although the student's advisor will be consulted in making this decision, the advisor will not be allowed to submit a letter on behalf of the student. This places the burden for managing the exception on the student.

Plan of Study [4]

Plan of Study (D-2) should be reviewed during the QE process and submitted no later than one (1) month after the QE passing date.

The student must substantially complete the course work outlined in the Plan of Study to the satisfaction of the doctoral program committee and the Graduate School before being declared ready for the comprehensive examination.
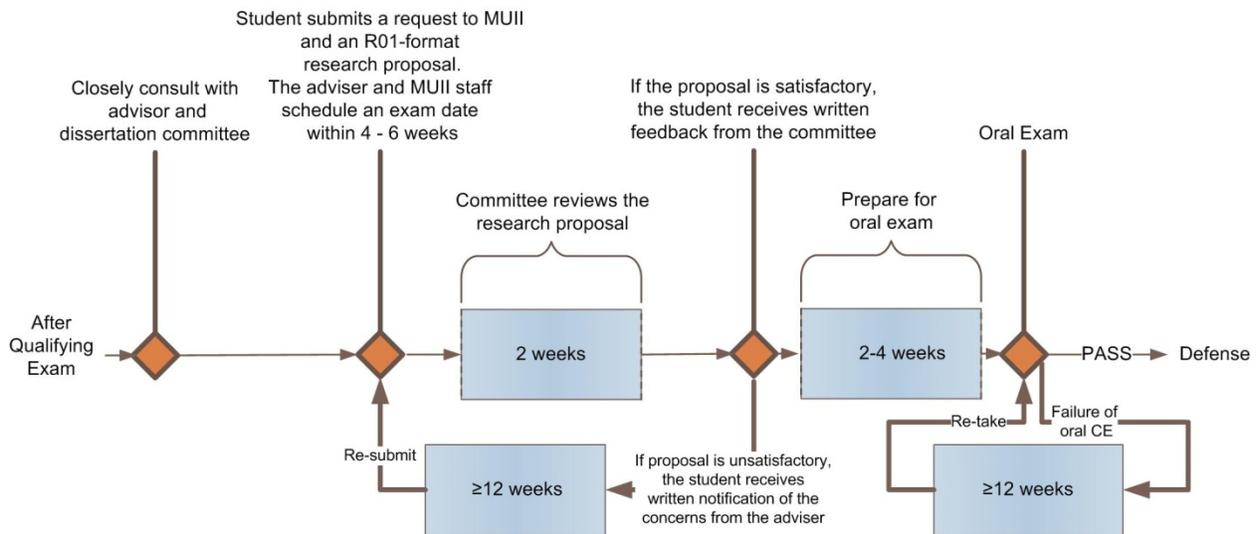
Credit-Hour Requirement

MU requires a minimum of 72 credit hours beyond the baccalaureate degree for PhD degrees. The student's dissertation committee must approve all coursework used to satisfy the credit hour requirement and may require additional coursework beyond these minimums.

Comprehensive Examination (CE)
(http://gradschool.missouri.edu/policies/doctoral/requirements/d3.pdf)

A doctoral student must successfully complete the comprehensive examination within a period of five years, beginning with the first semester of enrollment as a Ph.D. student.

The MUII Comprehensive Examination (CE) is a two-stage process, which includes a research proposal submission (written portion in R01 format) and an oral CE. Students are referred to the following figure for the process timeline.

Request: The CE process begins when the student submits to MUII an official written request to MUIIGraduateProgram@missouri.edu and the comprehensive exam proposal with the consent of the student's research advisor. The student must follow the guidelines of an R01 proposal (http://grants.nih.gov/grants/funding/r01.htm) for the organization and content of the comprehensive exam proposal (i.e., summary, narratives, research plan, and references). The advisor will work with the committee and MUII office to finalize the examination date. The Institute will forward the proposal to the dissertation committee within two business days and schedule an examination date no sooner than 4 weeks and no later than 6 weeks. The student, advisor, and committee members will receive a confirmation e-mail from MUII office upon finalization of the examination date.

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[4] http://gradschool.missouri.edu/policies/doctoral/requirements/plan-study-requirements.php

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Research Proposal: The committee will review the proposal and decide if its quality is satisfactory. If the proposal is deemed satisfactory with no more than one dissenting vote, the student will receive written feedback from the committee within two weeks after receiving the CE confirmation e-mail from MUII. If the proposal is deemed unsatisfactory, the student and MUII office will receive written notification of the concerns of the committee from the advisor. If unsatisfactory, the student must submit a revised proposal no sooner than 12 weeks after receiving the written notification. A student may only resubmit one time. Failing a second time will result in dismissal from the program.

Oral CE: The first part of the oral CE is open to the public and will be advertised by MUII. The student will provide an oral presentation on the research proposal. The student's advisor will determine the precise format of the presentation. The Dissertation Committee will ask questions related to the research proposal in general. The questions will not be limited to the feedback provided by the committee prior to the oral examination. Potential questions include, but are not limited to, the student's preliminary research results, research design, technical approach, and the next phase of the student's research. The second part of the exam is closed to the public, with only the dissertation committee and the candidate in attendance. Immediately following the public portion of the defense, the committee and student will continue the defense in private. The full committee will then meet in closed session to vote on whether the student has passed. The entire oral CE is expected to take 2-3 hours.

 There are two possible outcomes from the CE.

(1) If the committee determines that the examination is satisfactory, with no more than one dissenting vote, the advisor (dissertation committee chair) will submit the Doctoral Comprehensive Examination Results (D3) form to the DGS, who will then submit it to the MUII office in advance of the one month Graduate School deadline.

(2) If the examination is unsatisfactory, the committee, in consultation with the DGS, will provide a written report to the student indicating key issues identified, provide advice for addressing the issues, and set a timeframe for retaking the oral examination. The student must wait at least 12 weeks before retaking the oral exam. Failing the CE a second time will result in dismissal from the program.

Students who pass the CE will enter into their doctoral candidacy, and should register for INFO INST 9090 for all future research hours.

Dissertation Defense

The doctoral dissertation defense must be scheduled no sooner than seven months after successful completion of the CE (http://gradschool.missouri.edu/policies/doctoral/requirements/dissertation.php). The dissertation must be written on an informatics subject approved by the candidate's doctoral program committee, must embody the results of original and significant investigation, and must be the candidate's own work.

Students are encouraged to actively communicate with the dissertation committee while they are working on their dissertations. The dissertation defense process begins when the candidate submits a draft of the dissertation with the consent of the advisor and an official e-mail request to the Institute MUIIGraduateProgram@missouri.edu. The advisor will work with committee members and the MUII office to schedule the examination date.   The Institute will electronically forward the dissertation draft to the committee within two business days and advertise a defense date, that is at least two weeks from the date the committee receives the electronic dissertation draft. The student will supply a paper copy to those committee members who request a copy. The candidate must be enrolled to defend the dissertation, which can only be defended when MU is officially in session (http://gradschool.missouri.edu/policies/doctoral/requirements/candidacy-enrollment.php).

The examination consists two parts - one part open to the public and one part closed. The entire defense is expected to be 2-3 hours.

(1) The open section of the defense will be an oral presentation to the public audience by the candidate with a question and answer period following. The student advisor will determine the precise format of the presentation.

(2) The second part of the exam is closed to the public, with only the dissertation committee and the candidate in attendance. Immediately following the public portion of the defense, the committee and

student will continue the defense in private. The full committee will then meet in closed session to vote on whether the student has passed.

For the dissertation to be successfully defended, the student's doctoral committee must vote to pass the student on the defense with no more than one dissenting or abstaining vote. Failure of the dissertation defense will result in dismissal from the program.

Once the defense is completed satisfactorily, the committee chair will submit results (the D-4 form) to the MUII office. The MUII office will then submit the D-4 form to the Graduate School (http://gradschool.missouri.edu/policies/doctoral/requirements/d4.pdf). The candidate will revise the dissertation draft based on the committee's feedback before submission to the Graduate School.

Experiential Learning/Lab Rotations

The purpose of the experiential learning and lab rotation activities is to acquaint students with on-going informatics research by having them spend time working with an existing researcher or research group. Experiential learning activities and lab rotations will expose students to various research data collection procedures, analysis and need for medical and biological research, particularly involving communication and dialogue skills with non-informatics collaborators. MUII affiliate faculty will solicit potential projects and forward the information to the MUII office at least two weeks before semester starts.

All MUII students are required to rotate through two different experiential learning or lab rotations in the first year of enrollment in the PhD program. Students may elect to have two additional rotations if desired during the second year. The DGS will consult with student's advisor, if any, for the assignment of the project. The principal investigator (PI) of the experiential learning site or the lab will collaborate on the expectations and rotation duties using the MUII Rotation Form (Appendix 4) prior to the actual rotation. If safety or other necessary training is needed, it has to be addressed in the form. Experiential learning and/or lab rotations, INFO INST 8088, are graded on an S/U (pass/fail) basis by the DGS based on the evaluation provided by the PI of the experiential learning site or the lab. The students who take INFO INST 8088 should present at the MUII seminar to share their rotation experiences with the students and faculty before the final week of the semester.

Participation should be equivalent to 60-80 hours of work for each credit hour received. Each rotation should consist of one credit hour.

Seminar Series

All MUII students will be enrolled in the MUII weekly seminar series (INFO INST 8087) for one credit hour per semester during their first two years of enrollment, for a total of four credit hours, and 0.5 credit hours per semester thereafter. Attendance at the MUII seminar series is required. MUII won't schedule any required courses that will have schedule conflicts with INFO INST 8087.

Journal Club

Students are encouraged to participate in the journal club, which is organized by the MUII Graduate Student Association.

Collaborative Degree Program(s)

Students with areas of interests outside of informatics may also wish to pursue a collaborative degree program between MUII and other degree programs. The purpose of the collaborative degree program is to allow students the opportunity to obtain advanced degrees in fields that complement the study of informatics and expand the student's knowledge and applicability.

Beginning in Summer 2011, MUII students may select the collaborative degree between the Master of Public Health program and MUII PhD in Informatics program. Students must be accepted by both MUII and the MPH program to be eligible. Upon completion of the PhD requirements for the Informatics Institute and degree requirements for the MPH in Health Promotion and Policy with Focus on Informatics, students will receive both the PhD in Informatics and MPH degrees. For a full list of courses for the MPH in Health Promotion and Policy with Focus on Informatics, please visit the MPH website: http://publichealth.missouri.edu/index.php

FELLOWSHIP AND RESEARCH ASSISTANTSHIPS

Teaching and research assistantships and fellowships are available for highly qualified applicants. There are several fellowship opportunities listed on the MUII website. Research assistantships are sponsored by faculty's funded research projects. Assignment and continuation of assistantships and fellowships are conditional upon satisfactory completion of the requirements of the offer.

TRAVEL FUNDS

Students are encouraged to apply for travel funds through the Graduate School programs and student travel grants/awards by professional conferences prior to asking for travel support from MUII. Budget permitting, MUII students in good standing are eligible to apply travel assistance. Students presenting podium presentations may receive up to $1,200 per academic year; students presenting poster presentations are eligible for up to $700 in travel funds per academic year. For additional funding, students should request assistance from their advisors. For further information regarding student funding, please visit the MUII website.

Students awarded travel funds must:

1. Have a peer-reviewed presentation at informatics-related conferences.

2. Promote MUII by referencing MUII's affiliation on the publication. The official wording should be "University of Missouri Informatics Institute."

Students have to submit the MUII Student Travel Authorization Form (Appendix 5) at least three weeks before the deadline for early registration. To receive reimbursement for MUII travel, all receipts to MUII office must be submitted no later than two week after travel.

RESOURCES AND FACILITIES

MUII can be found in multiple locations on the MU campus - Engineering Building West, the Clinical Support & Education Building, and the Christopher S. Bond Life Sciences Center, all of which have well-equipped laboratories containing state-of-the-art instrumentation and computing facilities for informatics research. Major instrumentation includes a Dell EM64T cluster system with 512 processors, an SGI Altix BX2 SMP server with 64 Itanium2 processors, and a number of DELL servers with multiple quad-core processors for computational research.

All MUII students are assigned Unix shell accounts on **lindberg.muii.missouri.edu** for their informatics course work and personal website hosting. Up-to-date forms listed in this handbook can be downloaded through the Institute's SharePoint site at https://umc.sharepoint.missouri.edu/sites/muii/. MUII is participating in Microsoft Developers Network Academic Alliance (MSDNAA). All students have access to free Microsoft software at
http://msdn08.e-academy.com/elms/Storefront/Home.aspx?campus=umissouri_infoinst

MUII has a variety of computing equipment, laboratories, and clinical settings available for instruction and research. These facilities, enhanced in conjunction with computing laboratories maintained by the campus, offer MUII students a wealth of opportunity to access and utilize a wide range of research settings best suited for their instructional and research needs. All of the computer equipment is connected to departmental, campus and global networks, which provides ready access to the exploding world of information and computational resources. Institute information can be obtained by accessing the MUII website at http://muii.missouri.edu.

Library resources are available through extensive collections of books and journals housed in Ellis Library, as well as collections in the Engineering and Mathematical Sciences and Health Sciences Libraries at MU. The entire library catalog at MU (all library branches), as well as the other campuses of the University of Missouri System, are available online, and can be searched from any computer access point at the university.

Administrative Office

The MU Informatics Institute director and administrative offices are located in room 241 Engineering Building West. The administrative office is open Monday through Friday from 7:30 a.m. – 4:30 p.m.

Mail

Official University business mail will be delivered to students' assigned mailboxes in Engineering Building West, Life Sciences Building, the Clinical Support and Education Building, or other campus locations where student's advisor's research group is located. Please do not arrange for personal mail to be sent to your campus address.

Telephones

When dialing an MU phone number using a campus phone, dial the last five digits of the number you are trying to reach. For example, if you are trying to reach the MUII office at 882-9007, dial "29007" to be connected. To reach university numbers that begin with 771, dial all seven numbers.

To make local, off-campus phone calls, first dial "9", followed by the seven-digit phone number you are trying to reach. Long distance phone calls must be placed by MUII staff or faculty and calls must be for university business.

Photocopies

Photocopy machines in Engineering Building West 241 and in Clinical Support and Education Building CE727 are provided for copying class-related materials only, and personal items may not be copied. The copiers require an access code for use; to obtain a code, see MUII staff.

INTERNATIONAL STUDENT & SCHOLAR SERVICES

International students bear sole responsibility for complying with any and all immigration regulations that may be applicable to their visa status. Contact an International Student & Scholar Services advisor in N52 Memorial Union with questions, or for assistance (1-573-882-6007). The ISSS website is http://international.missouri.edu/isss/.

Laptop Computer Loan Document for MUII Students

Student Name: _____   Student #: _____

Faculty Advisor: _____   First Enrolled: _____

Computer Information:

Manufacturer: _____   Serial #: _____

Sequence number: _____

Comments:

Computer Received by: _____   Date: _____

Print Name: _____

Computer Returned: _____

Date: _____

MUII Staff/Faculty member receiving computer: _____
(sign above and print name below)

_____
Printed Name of MUII Staff/Faculty member who checked in MUII computer

**Please refer to http://doit.missouri.edu/about/policies/aup.html and
http://doit.missouri.edu/about/policies/**

MUII Student Server Account and Storage Application Form

Student Name: _____   Student #: _____

Faculty Advisor: _____   First Enrolled: _____

Server Location: _____

Storage Amount Provided: _____

Appendix 3

MUII Qualifying Exam Request Form

Student Name:_____ Student ID: _____

Course number	Course Tile	Instructor	Term	Grade
Example: INFO INST 7005	Introduction to Bioinformatics: Tools and Applications	Dmitry Korkin	S09	A
Example: HMI 7430	Introduction to Health Informatics	Win Phillips	F08	A

QE Committee Member Information (i.e., John Doe, MUII Core Faculty/Nursing, doej@missouri.edu):

Committee Chair: _____ _____ _____
                 Name   MUII Affiliation/Tenure Department e-mail address

Committee member1: _____ _____ _____
                   Name   MUII Affiliation/Tenure Department e-mail address

Committee member2: _____ _____ _____
                   Name   MUII Affiliation/Tenure Department e-mail address

Committee member3 (optional – add more committee members as needed):

                 _____ _____ _____
                 Name   MUII Affiliation/Tenure Department e-mail address

Outside member: _____ _____ _____
                Name   Tenure Department   e-mail address

Student Signature _____ Date: _____

Advisor Signature _____ Date: _____

DGS Signature   _____ Date: _____

(Electronic signatures are acceptable)

MUII Office received: _____

(Attach a preliminary D2 form and 1-page research statement at least 10 pt fonts, single space.)

LABORATORY ROTATION FORM (INFO INST 8088)

Student Name: _____

Laboratory Director: The PI or senior personnel of the lab

Campus address:

Phone:

e-mail:

Project Title:

_____

Duration: From_____ (date)   To: _____ (date)

Human subject? (Yes/No) _____

Compliance and Safety Training(s) _____

Project Objectives: (2-3 sentences)

Project Description: (300 words max)

(Items to be included: lab training, informatics work, PI's expectations)[5]

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[5] Revised February 8, 2010

Approval Form

LABORATORY ROTATION (INFO INST 8088)

Title

_____

_____   _____

MUII DGS (signature & date)   Laboratory Director (signature & date)

                                         Lab Director, Ph.D (MD)
                                         Title + Affiliation
                                         Phone
                                         E-mail

MU Informatics Institute (MUII) Procedure for Requesting Student Travel Expenses to be paid by Faculty Member or Institute Funds

Complete Travel Authorization form

The MUII Student Travel Authorization form needs to be completed by the student requesting funds from the faculty member to attend an informatics conference. This form needs to be turned in to the MUII administrative office at least <u>three weeks</u> before the deadline for early registration.

Complete the form as instructed below.

- a. Student Name, MU e-mail address, and Student Number (#)

- b. Conference Name (spell out conference name, no abbreviations) and include conference site (city, state, and country if applicable)

- c. Paper Title – include all authors' names and their MUII affiliation (university and department, business or industry name)

- d. Travel Date(s) beginning and ending

Take the completed form to the faculty member who is funding your travel. Ask the faculty member to complete the funding section, and then submit the completed form to the MUII office in 241 Engineering Building West.

MU Informatics Institute (MUII) Student Travel Authorization Form
PRIOR AUTHORIZATION REQUIRED FOR ALL TRAVEL FUNDED BY MUII FUNDS

Student Name, MU e-mail address & Student #:	Conference Name and Site:
Paper Title and Authors′ Names with Affiliations [must include copy of peer-reviewed papers/abstracts and any meeting acceptance messages]:	Travel dates (begin – end dates) Have you applied other travel funds? (List all places you have tried)

BUDGET: Complete items that will be paid directly by University funds and anticipated expenses for each expense type.			
Registration:	$	Lodging:	$
Airfare:	$	Meals (see policy)[6]:	$
Transportation (including shuttle, taxi, subway):	$	Parking:	$
Mileage ($0.50 per mile):	$	Other (please explain):	$
TRAVEL AGENCY:		ESTIMATED TOTAL: $	
ACCOUNT NAME:		ACCOUNT NUMBER:	
COMMENTS (list available funds with MoCodes from your adviser and other funding sources):			

MUII Director′s approval is required and must be obtained PRIOR to making any reservations.	
Faculty Signature:	Date:
MUII Director Signature:	Date:

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[6] Actual meal cost with daily limit listed at http://bppm.missouri.edu/chapter2/2_090.html

MPH in Health Promotion and Policy with Focus on Informatics

Health Promotion and Policy
45 Total
BIOSTATISTICS
Minimum Required Credits: 9
STAT 7510 Applied Statistical Model I (3) STAT 8820 Applied Statistical Model II (3) INFO INST 8810 Research Methods in Health and Biomedical Informatics (3)
EPIDEMIOLOGY
Minimum Required Credits: 3
F_C_MD 8420 Principles of Epidemiology (3)
ENVIRONMENTAL HEALTH SCIENCES
Minimum Required Credits: 3
P_HLTH 8150 Human Health and the Environment (3)
HEALTH SERVICES ADMINISTRATION
Minimum Required Credits: 15
PUB_AF 8170 Public Policy Processes and Strategies (3) HMI 7410 Design of Health and Human Services Systems (3) INFO INST 7430 / HMI 7430 Introduction to Health Informatics (3) HMI 8571 Decision Support Systems for Healthcare (3) HMI 8610 Consumer Health Informatics (3)
SOCIAL AND BEHAVIORAL SCIENCES
Minimum Required Credits: 3
P_HLTH 8920 Social and Behavioral Sciences in Public Health (3)
PRINCIPLES AND PRACTICE OF PUBLIC HEALTH
Minimum Required Credits: 12
P_HLTH 7150 Principles of Public Health (3) P_HLTH 8980 Public Health Internship (6) P_HLTH 8970 Public Health Capstone (3)

Students should consult the MPH office for any changes in the curriculum.