

GRADUATE STUDENT HANDBOOK

MASTER OF SCIENCE
IN FORENSIC SCIENCE



www.forensic.msu.edu

COLLEGE OF SOCIAL SCIENCE
MICHIGAN STATE UNIVERSITY
EAST LANSING, MI

July 9, 2008

TABLE OF CONTENTS

Program Overview	1
Program Components	2
Degree Requirements	3
Admission Requirements	4
Thesis Information	4
Thesis Timeline	4
Thesis Proposal.....	4
Thesis Committee	4
Human Research Protection Program	5
Thesis Guide	5
Scheduling of Thesis Defense	6
Application to Graduate	6
Checklist for Completion of Degree	6
Departmental Policies	7
Academic Performance	7
Integrity and Safety in Research and Creative Activities	7
Student Conduct and Conflict Resolution	8
Career Related Services	13
Placement Services.....	13
Service Learning Center	13
Academic Improvement Services	13
Writing Center	13
Office of Supportive Services	13
Campus Resources	14
Resource Center for Persons with Disabilities	14
Office of Minority Student Affairs	14
Counseling Services.....	14
General Information	15
Academic Advising	16
Academic Standards	16
Campus Parking.....	16
Change of Enrollment.....	17
Correction of Grades	17
Deferred Grades.....	17
Frequently Used Websites and Phone Numbers	17
Graduate Assistantships.....	18
MSU NetID	19
Required Training and Immunizations	19
Student Identification Card	19
Time Limit.....	20
Transfer Credits.....	20
Withdrawal from the University	20
Course Descriptions.....	21

PROGRAM OVERVIEW

Forensic science - the application of the methods of science to legal matters - is an exciting, complex and multidisciplinary program of study. In it one employs the principles of chemistry, physics, biology, and mathematics, as well as social science theory and law, to help solve crimes and serve justice. Forensic science offers students who have a bachelor's degree in a natural or physical science an opportunity to apply their knowledge to serve justice. The program includes courses in criminal justice, forensic science, and law. There are also opportunities for research experience and field study in a practicing forensic science laboratory.

Michigan State University has long been recognized as a premier institution for research and education in forensic science. The School of Criminal Justice first offered a major in forensic science in 1946, and administers the oldest continually functioning educational degree program in forensic science in the United States. Michigan State University is home to a number of excellent resources for the study of forensic science. The School of Criminal Justice maintains modern laboratory facilities containing equipment and instrumentation for the analysis of virtually any type of physical evidence, from lasers for the detection of fingerprints to equipment for the analysis of DNA.

The Forensic Science Masters program at Michigan State University is designed to give students a broad theoretical and practical background in the scientific, legal, and investigative aspects of forensic science while providing the opportunity to study one of the major disciplines in depth. There are three concentrations offered: Forensic Chemistry, Forensic Biology, and Forensic Anthropology. Students may enroll in only one concentration; however, they may indicate a first and second choice during the application process. A short description of each concentration follows.

Forensic Chemistry: Focus is on trace evidence, including glass, paint, soil, and fibers, drugs and alcohol, explosives, and arson evidence. Current research in the forensic chemistry lab ranges includes developing methods for the detection of gunshot residue in tissue samples, investigating surface chemistries that affect fingerprint detection, and profiling illicit ecstasy tablets based on both the organic and trace metal impurities present. More information can be found at www.forchem.msu.edu.

Forensic Biology: Involves DNA analysis and serology. Research in the laboratory focuses on designing and perfecting techniques that help advance the fields of forensic biology and forensic molecular biology. We also strive to develop a better practical and theoretical understanding of methods currently used in state, federal and private forensic laboratories. Research encompasses both nuclear and mitochondrial DNA, and while the primary focus is on the human species, work is performed on trace evidence from domestic animals that may exist at a crime scene, and wildlife species that are endangered, threatened, or otherwise at risk. More information can be found at www.forbio.msu.edu.

Forensic Anthropology: Focus is on skeletal analysis, human identification, trauma, and evidence recovery.

Michigan State University's School of Criminal Justice has some of the most modern research and teaching forensic science laboratories in the country. Housed in the Chemistry Building, the

Ralph Turner Laboratory Complex contains state-of-the-art equipment including gas chromatography-mass spectrometry, FTIR, capillary electrophoresis, HPLC, fluorescence spectrophotometer, and polarized light microscopy. Additional laboratory instrumentation is available in the chemistry department. The DNA laboratories, located in Giltner Hall, include PCR and genetic analysis equipment (ABI 310 and Beckman CEQ 8000 genetic analyzers), electrophoresis equipment, digital photography equipment, and multiple thermocyclers. The forensic anthropology labs, located in Fee Hall, are equipped with bench space for osteological exams, a stereozoom microscope, an image superimposition center, and a GE portable x-ray unit.

The laboratory headquarters of the Michigan State Police Forensic Science Division is conveniently located near the MSU campus. This full-service laboratory is available as a source of research resources and internship placements. Faculty in the School of Criminal Justice and elsewhere on the campus regularly consult with the state police and conduct joint research projects with the help of forensic science students.

Through its career development and internship offices, the School of Criminal Justice provides internship opportunities for forensic science students. Internships consist of a one-semester placement with a federal, state, or municipal forensic science laboratory. This opportunity provides students with a chance to learn firsthand how a crime lab works and how scientific analysis is carried out on physical evidence. Many interns carry out research projects under the auspices of laboratory personnel. Academic credit is awarded for successful completion of internship placement.

Although the Master of Science degree in Forensic Science is administered by the School of Criminal Justice (College of Social Science), several colleges and departments cooperate in offering this interdepartmental degree. These include the colleges of Agriculture and Natural Resources, Human Medicine, and Natural Science, as well as the departments of Anthropology, Biochemistry, Chemistry, Pharmacology and Toxicology, Radiology, Resource Development, Statistics and Probability, and Zoology. Also participating are the Center for Advanced Microscopy, the Genetics Program, and the Medical Technology Program.

PROGRAM COMPONENTS

The program of each student shall consist of a minimum of 32 semester credits of course work beyond the bachelor's degree and 6 credits of thesis research totaling a minimum of 38 semester credits. The student must submit and defend a thesis reflecting original research focusing on a significant problem or issue in forensic science. The oral defense and submission of the thesis must be completed within six years from the time of first enrollment as a masters student. The student will need to select a forensic science faculty advisor who will serve as the chairperson on the thesis committee.

DEGREE REQUIREMENTS

The Master of Science program in Forensic Science is available only under Plan A (with thesis).
The student must complete at least 38 credits as follows:

	<u>Credits</u>
1. CJ 805 – Survey in Forensic Science	3
2. One of the following concentrations:	
Forensic Chemistry (17 credits)	
CEM 835 – Advanced Analytical Chemistry II	3
CJ 817 – Law and Forensic Science	2
CJ 819 – Forensic Analysis of Drugs and Alcohol	3
CJ 820 – Forensic Chemistry and Microscopic Evidence	3
NSC 820 – Scanning Electron Microscopy/Energy Dispersive X-Ray Microanalysis	3
PHM 431 – Pharmacology of Drug Addiction	3
Forensic Biology (20 credits)	
BMB 801 – Molecular Biology	3
CJ 817 – Law and Forensic Science	2
CJ 820 – Forensic Chemistry and Microscopic Evidence	3
CJ 824 – Forensic Serology	3
CJ 825 – DNA Profiling	3
FW 828 – Conservation and Genetics - or -	3
GEN 842 (FOR 842) – Population Genetics	3
STT 464 – Statistical Methods for Biologists I	3
Forensic Anthropology (25 credits)	
ANP 441 – Osteology and Forensic Anthropology	4
ANP 840 – Biocultural Evolution	3
ANP 841 – Physical Anthropology	3
ANP 842 – Human Osteology	5
ANP 844 – Topics in Forensic Anthropology*	4
ANTR 551 – Medical Gross Anatomy	6
*students must enroll for ANP 844 twice, in increments of 2 credits.	
3. FRS 899 – Masters Thesis Research	6
4. Electives (chosen in consultation with an academic advisor)	4-12
5. Oral defense of thesis	

ADMISSION REQUIREMENTS

In order to apply to the program, students must have a bachelor's degree from an accredited institution in a major appropriate to the concentration sought, and have maintained a cumulative undergraduate GPA of at least 3.0. Potential applicants should be aware that the masters program is quite competitive and recent experience has been that successful applicants have undergraduate GPAs of 3.5 or higher. Examples of appropriate undergraduate majors are Chemistry, Biochemistry, or Chemical Engineering (Forensic Chemistry); Biology, Human Biology, Cell and Molecular Biology, Genetics, etc. (Forensic Biology); and Anthropology with an emphasis in Physical Anthropology (Forensic Anthropology).

In addition to all other application material, international applicants must submit TOEFL scores. Applicants must score at least 550 on the non-computer based TOEFL, with scores of at least 52 on each subsection of the exam. Those taking the computer based TOEFL must score at least 213, with scores of at least 18 in Listening, 20 in Structure/Writing, and 19 in Reading. Students from primarily English-speaking countries may have this requirement waived at the discretion of the department.

Application forms and instructions may be found at www.forensic.msu.edu/appinstructions.htm.

THESIS TIMELINE

A student's research plan should be formalized during the first year of study, in consultation with the student's thesis committee chair. A thesis proposal should be submitted by the end of the student's first year of study. If a student's thesis committee chair is not a forensic science faculty member (this may occur if a student is pursuing a Masters in Forensic Science and a PhD in a related area), the coordinator of the student's concentration and the committee chair will need to review and approve the proposal. Once approved, the proposal should be signed by the committee chair and given to the graduate secretary to be added to the student's file.

THESIS PROPOSAL

The proposal should be approximately 3-5 pages long, and submitted to the student's thesis chair. It should include the following sections:

- Introduction – outlines the project and your reasons for doing it.
- Literature review – a review of the 5-10 most important articles that describe what has already been done in this field and how they contribute to your work.
- Methods, materials and equipment to be utilized in the project.
- A timeline for the research – the data you expect to collect and over what period of time it will be collected.
- Expected results.
- The anticipated contribution this project will make to forensic science.

THESIS COMMITTEE

The composition of the thesis committee will vary according to the concentration in which the student is enrolled. Each committee must contain at least three members. At least one must be a tenure stream member of the faculty of the forensic science program. Normally this would be the coordinator of the concentration (chemistry, biology or anthropology) in which the student is enrolled. Another must be a tenure stream faculty member from the School of Criminal Justice,

who is not part of the forensic science program faculty. The third member of the thesis committee may be a faculty member drawn from the university or from a relevant discipline of the Michigan State Police forensic science division or other crime laboratory. This member must be approved by the forensic science program and the student. There may be additional members of the committee as described above.

An exception may be granted by the Dean of the Graduate School to allow a non-tenure stream faculty member or an academic specialist to serve on a Masters student's examination committee or as the thesis advisor. To request to have non-tenure faculty or academic specialists serve on your Thesis Committee, the following materials must be submitted together:

- Letter from the Director of the Forensic Science program, with supporting signatures from the Director of the School of Criminal Justice and the Dean of the College of Social Science.
- Letter from the non-tenure faculty member or academic specialist summarizing his/her background and qualifications to serve as a member of a graduate student committee.
- Copy of the non-tenure faculty member or academic specialist's vitae.
- Two letters of reference that speak to the person's qualification to serve on a graduate student committee; at least one letter must be from an external source.

Submit complete package to Dean Karen Klomparens, The Graduate School, 110 Linton Hall, Michigan State University, East Lansing, Michigan, 48824

HUMAN RESEARCH PROTECTION PROGRAM

The Human Research Protection program is an Institutional Review Board (IRB). Federal and University regulations require that all research projects involving human subjects be reviewed and approved by an IRB **before initiation**. All forensic science thesis projects must receive UCRIHS approval, even those that do not have direct contact with human subjects (such as secondary data sources). Under the regulations, research is defined as a formal investigation designed to develop or contribute to generalizable knowledge. A human subject of research is an individual (1) from whom an investigator obtains data or (2) about whom the researcher obtains confidential information.

Faculty and students must submit the proper forms when the research they will undertake will include actively gathering the data from human subjects as described above, and/or use of either current or established data of human subjects gathered at a previous time. Failure to do so could result in rejection of your thesis by the Graduate School. Before a graduate student begins any research project, the student should consult with his or her faculty advisor or chair of the guidance committee. For more information about the review process, contact the Human Research Protection office at 517-355-2180, irb@msu.edu, or go to 202 Olds Hall. You may also find information at www.humanresearch.msu.edu.

THESIS GUIDE

The *Formatting Guide for Masters Theses and Doctoral Dissertations* is available at the Graduate School, 118 Linton Hall. The information contained therein may also be accessed at www.grad.msu.edu/format.htm. Your thesis must be prepared in accordance with the specifications listed.

An unbound thesis must be submitted to the Graduate School by the student; the copy submitted to the School of Criminal Justice must be hardbound. The School of Criminal Justice will be unable to submit your degree certification paperwork to the Dean's Office until the hardbound copy is received. Students should also submit a hardbound copy to their thesis chair, and check with their other committee members to determine whether they would like informally bound (plastic cover, spiral bound) copies.

SCHEDULING OF THESIS DEFENSE

Particular attention must be paid to the university calendar for the scheduling of your defense and the submission of the final copy of the thesis to the Graduate School. Generally, the defense should not be scheduled during the summer semester. If you must defend at that time, obtain written consent from all committee members prior to May 1. Written consent implies that the committee members will be present at the defense.

When a date is scheduled, please be sure to allow time for revisions that may be necessary before the thesis is accepted. If a student intends to graduate during a particular semester, there should be at least three weeks between the date of defense and the last day of the semester.

APPLICATION TO GRADUATE

Students must *apply* to graduate. Applications are available at 150 Hannah Administration Building, or may be submitted electronically at www.reg.msu.edu under the Graduation/Honors menu. The application must be submitted by the first week of the semester in which the student plans to graduate. **Summer graduates should turn in their application by the first week of Spring semester.** If graduation is denied, the student must reapply, as the application is not automatically forwarded to the following semester.

CHECKLIST FOR COMPLETION OF DEGREE

There are a number of things students should consider when preparing to graduate.

- Be enrolled in at least one credit the semester in which the thesis is defended. Students do not need to be enrolled the semester in which they graduate.
- Apply to graduate the first week of semester in which you intend to graduate (this may be done online at <http://www.reg.msu.edu/StuForms/GradApp/GradApp.asp>).
- Check with graduate secretary to make sure all requirements have been met, and that all necessary forms have been signed and forwarded to the appropriate offices. Please do this early in the semester.
- Visit the Graduate School at 118 Linton Hall or go to www.grad.msu.edu/graduation.htm for information about formatting and submitting your thesis, graduation and commencement, etc.
- Take thesis to 118 Linton Hall to have format checked. This may be done at any time during the semester.

- Determine date and time of defense, and confirm with all committee members. Notify the graduate secretary so she may assist in reserving a room and any necessary equipment (laptop, LCD projector) for the defense.
- Defend thesis and complete any required revisions.
- Submit hardbound copy of thesis to graduate secretary
- Submit unbound copy of thesis to the Graduate School at 118 Linton Hall. Please check www.grad.msu.edu/current/final.htm for deadlines.

DEPARTMENTAL POLICIES

ACADEMIC PERFORMANCE

Masters students must maintain a GPA of at least 3.0 throughout their program of study. The accumulation of grades below 3.0 (including N grades in the P-N grading system) in more than two semester courses of three or more credits each removes the student from candidacy for the degree. The student may also be removed from the program if they are not progressing at the appropriate rate.

INTEGRITY AND SAFETY IN RESEARCH AND CREATIVE ACTIVITIES

(an excerpt from the Guidelines for Integrity in Research and Creative Activities)

The conduct of research and creative activities by faculty, staff, and students is central to the mission of Michigan State University and is an institutional priority. Faculty, staff, and students work in a rich and competitive environment for the common purpose of learning, creating new knowledge, and disseminating information and ideas for the benefit of their peers and the general public. The stature and reputation of MSU as a research university are based on the commitment of its faculty, staff, and students to excellence in scholarly and creative activities and to the highest standards of professional integrity. As a partner in scholarly endeavors, MSU is committed to creating an environment that promotes ethical conduct and integrity in research and creative activities.

Innovative ideas and advances in research and creative activities have the potential to generate professional and public recognition and, in some instances, commercial interest, and financial gain. In rare cases, such benefits may become motivating factors to violate professional ethics. Pressures to publish, to obtain research grants, or to complete academic requirements may also lead to an erosion of professional integrity.

Breaches in professional ethics range from questionable research practices to misconduct. The primary responsibility for adhering to professional standards lies with the individual scholar. It is, however, also the responsibility of advisors and of the disciplinary community at large. Passive acceptance of improper practices lowers inhibitions to violate professional ethics.

Integrity in research and creative activities is based not only on sound disciplinary practice but also on a commitment to basic personal values such as fairness, equity, honesty, and respect. These guidelines are intended to promote high professional standards by everyone- faculty, staff, and students alike.

Integrity in research and creative activities embodies a range of practices that includes:

- Honesty in proposing, performing, and reporting research
- Recognition of prior work
- Confidentiality in peer review
- Disclosure of potential conflicts of interest
- Compliance with institutional and sponsor requirements
- Protection of human subjects and humane care of animals in the conduct of research
- Collegiality in scholarly interactions and sharing of resources
- Adherence to fair and open relationships between senior scholars and their coworkers

Please see <http://www.msu.edu/user/gradschl/integrity.htm> for more information.

CONFLICT RESOLUTION

In the event a conflict cannot be resolved informally between a faculty member and student, formal procedures are available. The “Academic Freedom for Students at Michigan State University” (AFR) and the “Graduate Student Rights and Responsibilities at Michigan State University” (GSRR) documents establish the rights and responsibilities of MSU students and prescribe procedures for resolving allegations of violations of those rights through formal grievances. In accordance with the AFR and the GSRR, the School of Criminal Justice, College of Social Science, has established the following procedures for adjudicating student academic grievances.

These procedures also can be used to resolve disputes regarding allegations of academic dishonesty and violations of professional standards in which no disciplinary action is recommended in addition to a penalty grade of 0.0 in the course. (See AFR 2.4.4.1, 2.4.6, 2.4.6.2, 2.4.8 and 2.4.9; GSRR 5.4.1, 5.5.1 and 5.5.2.) Note: Students may not grieve dissatisfaction with the competence of instruction. (See AFR 2.2.1; GSRR 2.2.1.) Members of the Graduate Employees Union who want to file a grievance that relates to a violation of the Agreement between MSU and the GEU should follow the procedures detailed in the Agreement.

I. THE COMPLAINT PROCESS:

- A. A student who believes an instructor, including a graduate teaching assistant, has violated her or his academic rights shall first attempt to resolve the dispute in an informal discussion with the instructor. (See AFR 2.4.2; GSRR 5.1.1, 5.3.1, 5.3.2 and 5.3.5.)
- B. If the dispute remains unresolved after discussion with the instructor, the student should consult the Associate Director for Undergraduate Studies of the School of Criminal Justice and/or the University Ombudsman for assistance. (See AFR 2.4.2; GSRR 5.3.1 and 5.3.2.)
- C. If the dispute remains unresolved after discussion with the Associate Director or Ombudsman, the student may submit to the Associate Director a written, signed statement requesting a grievance hearing. The statement must (1) specify the alleged violations of academic rights to justify the hearing, (2) identify the individual(s) against whom the complainant is filed and (3) state the redress the student seeks that could be implemented by the Associate Director. (See AFR 2.4.2 and 2.4.6; GSRR 5.3.2, 5.3.5 and 5.3.6.)

- D. A request for a grievance hearing must normally be initiated no later than mid-semester following the semester in which the alleged violation of academic rights occurred (exclusive of summer semester). If the student (the “complainant”) or the instructor (the “respondent”) is absent from the University during that semester, or if other appropriate reasons exist, the Hearing Board may grant an extension to this deadline. If the University no longer employs the respondent before the formal grievance procedures are completed, the grievance may still proceed. (See AFR 2.4.2.1; GSRR 5.3.6.1.)

II. COMPOSITION OF SCHOOL OF CRIMINAL JUSTICE HEARING BOARD:

- A. The School of Criminal Justice shall constitute a Hearing Board no later than the beginning of the fall semester of each academic year. Members shall serve one calendar year (See GSRR 5.1.6.).
- B. The School of Criminal Justice Hearing Board shall include three faculty and three students. The Associate Director for Undergraduate Studies will serve as Chair of the hearing board for undergraduate student grievances, but can appoint a designee in unusual circumstances. The Director of the School of Criminal Justice will serve as Chair of the hearing board for graduate student grievances, but can appoint a designee in unusual circumstances. Undergraduate students will hear cases in which the complainant is an undergraduate student. Graduate students will hear cases in which the complainant is a graduate student. (See AFR 2.4.3 and 2.4.4.1; GSRR 5.1.2 and 5.1.5.)
- C. At the beginning of each academic year, two faculty representatives will be assigned to serve on the School of Criminal Justice Hearing Board for one calendar year by the Director of the School. The Director will select an alternate when the need arises. The hearing board will contain a total of three faculty members, with either the Director or Associate Director acting as chair.

Student members of hearing boards will be selected after a formal grievance is filed.

In the case of a grievance filed by a graduate student, the Graduate Student Representative to the School of Criminal Justice will be notified that graduate student members are needed for a hearing board. That individual will notify the graduate student body that volunteers are needed, and the representative will select four members for the hearing. One individual will be chosen randomly as an alternate.

In the case of a grievance filed by an undergraduate student, the undergraduate student organizations in the School of Criminal Justice (Alpha Phi Sigma and the American Criminal Justice Association) will be notified that undergraduate student members are needed for a hearing board. The student groups will select two members each from their groups. One individual will be chosen randomly as an alternate.

III. REFERRAL TO A SCHOOL OF CRIMINAL JUSTICE HEARING BOARD:

- A. Upon receipt of a written request for a grievance hearing, the Associate Director of the School of Criminal Justice shall transmit a copy of the grievance within ten class days to the Director of the School of Criminal Justice, the Hearing Board members,

and to the respondent(s). No one involved in the case may serve on the Hearing Board. In unusual circumstances, the Director of the School of Criminal Justice, in consultation with the Dean, may waive jurisdiction and refer the request for a hearing to the College of Social Science Hearing Board. (See AFR 2.4.2.2, 2.4.2.3 and 2.4.6; GSRR 5.1.2, 5.1.7, 5.3.6.1, 5.3.6.2 and 5.4.3.)

- B. The School of Criminal Justice Hearing Board shall review a written request for a grievance hearing for jurisdiction and judicial merit and request a written response from the respondent(s). After considering all submitted information, the Hearing Board may:
 - 1. Decide that sufficient reasons for a hearing do not exist and dismiss the grievance.
 - 2. Decide that sufficient reasons for a hearing exist and accept the request, in full or in part, and proceed to schedule an appeal hearing.
 - 3. Invite the parties to meet with the board for an informal discussion of the issues. Such a discussion shall not preclude a later hearing. (See AFR 4.4.2; GSRR 5.4.3 and 5.4.6.)
- C. Following a decision by the School of Criminal Justice Hearing Board to schedule a grievance hearing, the Chair of the Hearing Board shall negotiate a hearing date with the parties in a timely manner and schedule an additional meeting only for the Hearing Board in the event that additional deliberations on the findings become necessary. At least three class days before the scheduled hearing, the Chair of the Hearing Board shall notify the respondent(s) and the complainant(s) in writing of the time, date and place of the hearing; the names of the parties to the grievance; the names of the Hearing Board members; and the names of the witnesses and advisers, if any. The Hearing Board may set reasonable time limits on each party to present its case and so inform the parties in the written notification. (See AFR 4.4.3; GSRR 5.4.7.)
- D. If the complainant fails to appear at the hearing, the School of Criminal Justice Hearing Board may either postpone the hearing or dismiss the case. If the respondent fails to appear at the hearing, the Hearing Board may either postpone the hearing or hear the case in the respondent's absence. (See AFR 4.4.5 and 4.4.7; GSRR 5.4.9).
- E. Either party to the grievance hearing may request a postponement of the hearing. The Hearing Board may either grant or deny the request. (See AFR 4.4.6; GSRR 5.4.8.)

IV. SCHOOL OF CRIMINAL JUSTICE HEARING PROCEDURES:

- A. The Chair of the School of Criminal Justice Hearing Board shall convene the hearing at the agreed-upon time, date and place. The Chair will ensure that a collegial atmosphere prevails and enforce time limits, as necessary, for each party's presentation. During the hearing, parties to a grievance shall have an opportunity to state their cases, present evidence, designate witnesses, ask questions and present a rebuttal. (See AFR 2.4.4; GSRR 5.4.10.1.)

- B. To protect the confidentiality of the information, attendance at the hearing may be limited to the Hearing Board, the complainant(s), the respondent(s), witnesses for either party, if any, and an adviser for each party, if any. Any witnesses called by the complainant and the respondent shall be excluded from the proceedings except when testifying. Witnesses must confine their testimony to their own, independent recollection and may not speak for others. The Hearing Board may limit the number of witnesses. Unless otherwise approved by the Hearing Board, advisers and witnesses shall be limited to members of the MSU community (faculty, staff or students). Involvement of an adviser normally should not be required. Each party must present her/his own case, and advisers may have a voice at the hearing. (See AFR 2.4.4.2, 4.2.3 and 4.4.8; GSRR 5.4.10.)
- C. To ensure orderly questioning, the Chair of the Hearing Board must recognize individuals before they speak. All parties have the right to speak without interruption. The School of Criminal Justice Hearing Board may set reasonable time limits on each party to present its case and shall extend equal time to each party.
- D. The hearing will proceed as follows:
 - 1. The Chair of the Hearing Board introduces hearing panel members, the complainant(s), the respondent(s) and the advisers, if any. The Chair reviews the hearing procedures, including time restraints, if any, for presentations by each party and witnesses. The Chair explains that the burden of proof rests with the complainant, with the exception of appeals of allegations of academic dishonesty, in which case the instructor bears the burden of proof. (See AFR 2.4.9.)
 - 2. Opening statements by the complainant(s).
 - 3. Opening statements by respondent(s).
 - 4. Presentation of complainant's case, including statements by the adviser, witnesses and questioning of complainant, complainant's adviser and complainant's witnesses by the respondent and Hearing Board.
 - 5. Presentation of respondent's case, including statements by the adviser, witnesses and questioning of respondent, respondent's adviser and respondent's witnesses by the complainant and Hearing Board.
 - 6. Closing statement by complainant(s).
 - 7. Closing statement by respondent(s).
 - 8. Final questions by Hearing Board.
- E. The School of Criminal Justice Hearing Board shall excuse all parties to the grievance and determine its findings. When possible, deliberations should take place directly following the hearing and/or at the previously scheduled follow-up meeting.

F. After deliberations, the School of Criminal Justice Hearing Board shall promptly prepare a written report of its findings. The report shall indicate the rationale for the decision and the major elements of evidence, or lack thereof, that support the Hearing Board's decision. The Chair shall forward copies to the parties involved, the Director of the School of Criminal Justice, the Dean of the College of Social Science, the Ombudsman and, in cases involving graduate students, the Dean of the Graduate School. All recipients must respect the confidentiality of the report. When a Hearing Board finds that a violation of academic rights has occurred and that redress is possible, it shall direct the Director to provide redress. The Director in consultation with the Hearing Board, shall implement an appropriate remedy. (See AFR 2.4.5; GSRR 5.4.11.)

V. APPEALS TO COLLEGE OF SOCIAL SCIENCE HEARING BOARD:

A. Either party to a grievance may appeal the decision of the School of Criminal Justice Hearing Board to the College of Social Science Hearing Board. The appeal must be in writing, signed and submitted to the Dean of the College of Social Science within ten class days following notification of the Hearing Board's decision. While under appeal, decision of the Hearing Board will be held in abeyance. (See AFR 2.4.7 and 2.4.7.3; GSRR 5.4.12, 5.4.12.2 and 5.4.12.3)

B. A request for an appeal must allege, in sufficient particularity to justify a hearing, that the initial Hearing Board failed to follow applicable procedures for adjudicating the hearing or that findings of the initial Hearing Board were not supported by the preponderance of the evidence. The request also must include the redress sought. Presentation of new evidence normally will be inappropriate. (See AFR 2.4.7.2 and 8.16; GSRR 5.4.12.1, 5.4.12.2 and 8.1.15.)

C. Upon receiving a request for an appeal of a School of Criminal Justice Hearing Board decision, the College of Social Science Hearing Board may follow the procedures in sections III and IV above.

D. In hearings involving undergraduate students, a complainant or respondent may appeal a decision of the College of Social Science Hearing Board to the University Integrity Review Board only if (1) the initial hearing took place at the College level or (2) if the hearing involved areas such as allegations of academic dishonesty, violations of professional standards or falsification of admission or academic records. In hearings involving graduate students, a complainant or respondent may appeal a decision of the College Hearing Board to the Graduate Student Judiciary only if the initial hearing took place at the College level. (See AFR 2.4.7.1 and 2.4.7.1.2; GSRR 5.4.12.)

Note: The references above to the AFR and GSRR documents are not exhaustive. Parties to the grievance hearing should consult the appropriate document.

CAREER RELATED SERVICES

PLACEMENT SERVICES

Career Services and Placement (CSP), located in the Student Services Building, includes the Career Development Center and the Student Employment Office. CSP provides assistance to students and alumni planning careers and seeking jobs in business, industry, government, social services, and education. CSP conducts workshops on constructing resumes, interviewing, conducting job campaigns and related topics each week throughout the semester for students and alumni. A number of career fairs are sponsored during the year. A Summer Employment Fair is usually held in February. For information on these career fairs, check with Career Development Center staff in Room 6, Student Services Building.

CSP provides walk-in advising for quick questions regarding resumes, job searches, or careers at 113 Student Services. Walk-in appointments are limited to 15 minutes and available times may vary from semester to semester. Check for hours posted at 113 Student Services. Regular appointments may be made for more intensive advising on careers and job searches.

Student Employment Office staff help students find part-time and summer jobs on and off campus. All work-study positions are obtained through the Student Employment Office at 110 Student Services. Students must qualify for work-study through the Financial Aid Office before seeking work-study positions.

Registration with Career Development and Placement Service is encouraged for all graduating students. It is particularly important for those seeking employment or planning to continue their education. Students should register for job referrals and on-campus interviewing at the CSP website, www.msu.edu/csp/. Internet access and instructions for accessing the CSP website should be available in any campus computer lab.

SERVICE LEARNING CENTER

The Service Learning Center (SLC) provides opportunities for students to integrate academic work with meaningful community service. There are over thirty programs and more than 500 positions available to students. These positions help to meet established community needs in human service agencies, schools, health agencies, and government.

Students interested in gaining career-related experience through volunteering may contact SLC, complete an application, and interview for a position. Records of students' placements are maintained to verify students' experience. Students may request an SLC transcript. For more information, students should pick up a reference handbook available in Room 26, Student Services Building.

ACADEMIC IMPROVEMENT SERVICES

THE WRITING CENTER

The Writing Center at 300 Bessey Hall can provide assistance with any writing project at any stage. Writing center consultants can assist with selecting a topic, organizing ideas, editing a rough draft, or proofreading a final draft. Call 432-3610 for an appointment.

OFFICE OF SUPPORTIVE SERVICES

The Office of Supportive Services (OSS) was developed to provide academic support, tutorial services and a computer lab for students in need of additional academic support. These facilities and services are offered to students who meet eligibility requirements. The eligibility guidelines include College

Achievement Admission Program students (CAAP), handicapper students, minority students, students receiving federal financial aid, and/or students who have below a 2.5 MSU grade point average.

Services available at OSS include: tutorial assistance, a computer laboratory and special computer programs, skill-enrichment programs, graduate school planning assistance, Summer Research Opportunities for Minorities Students (SROP/McNair) scholarships, and Summer University Program Encouraging Retention (SUPER) programs. For more information about any of these programs, please contact the Office of Supportive Services at 209 Bessey Hall or by calling 353-5210.

CAMPUS RESOURCES

RESOURCE CENTER FOR PERSONS WITH DISABILITIES (RCPD)

The RCPD has staff specialists responding to mobility, visual, hearing, alternative learner concerns, and other handicapper populations, thus enabling their involvement in University activities. The RCPD office is located at 120 Bessey Hall and may be reached at 353-9642 (TTY: 355-1293). Services available are:

Volunteer Reading Services	TV Magnifiers
Oral/Sign Interpreters	Personal Assistant Referral System
Taped Library	Enlarger/Copier
Transport Service (on-campus transport)	Student/Faculty Consultation
Optical to Tactile Converter	Kurzweil Reading Machine
Environment Accommodation Info or Assistance	Registration Assistance
Talking Computer Terminal	Telecommunication Device for the Deaf
Assistance in Housing Accommodations	Campus Orientation

OFFICE OF MINORITY STUDENT AFFAIRS (OMSA)

OMSA coordinates a range of services and programs to help racial/ethnic minority students adjust and succeed at Michigan State University. They provide cultural programming, conferences, opportunities for student leadership, and student advocacy. For more information, you may visit OMSA at 338 Student Services Building, or call 353-7745.

COUNSELING SERVICES

The Counseling Center provides developmental and psychological counseling, including assistance in decision-making on immediate issues and long-range plans. Career, ethnic, self-management, sexual assault and substance abuse counseling are also provided. Special group counseling services are available and will be discussed during the initial meeting with the counselor. A Self-Management Laboratory provides resources for students considering self-directed behavioral changes. The Counseling Center has two locations on campus: one at 207 Student Services Building and one at 335 Olin Health Center. The respective telephone numbers are 355-8270 and 355-2310. Regular office hours are 8:00 a.m. to noon and 1:00 p.m. to 5:00 p.m., Monday through Friday at both locations. Walk-ins are seen for crisis counseling on Wednesdays, 10:00 to 11:00 a.m. and 2:00 to 4:00 p.m.

The Multi-Ethnic Counseling Center Alliance (MECCA), for minority students who wish to work with minority counselors, is located in 207 Student Services. MECCA assists students of all racial and ethnic groups who are experiencing cultural, social or personal conflicts.

The Sexual Assault Crisis and Safety Education program assists victims of rape/sexual assault and helps reduce such incidents in the University environment. An array of workshops, films and presentations are available upon request. Persons may contact the program coordinator in 207 Student Services. There is also a 24-hour crisis line available at 372-6666.

The Testing Office at 207 Student Services is not only a national test and testing information center, but also provides complete testing services for students working with counselors in the assessment of their personal attributes. Resources include interactive computer-based guidance systems that provide assistance in making informed major choices and career decisions. They can help gather information, explore options, and develop strategies for decision-making.

Major and Career Counseling with trained staff is available at both 207 Student Services and 335 Olin Health Center. Counselors assist in dealing with such issues as family pressures, issues of inadequacy, motivation, uncertainty concerning aptitudes and interests, or generalized problems in decision-making. Computer-based guidance systems are available on an appointment basis in these locations:

Career Development Center – 6 Student Services, 355-9510 ext. 335

Learning Resources Center – 204 Bessey Hall, 353-9089

Adult Services, Office of the Vice Provost for University Outreach

22 Kellogg Center, 353-0971

229 East Akers Hall, 353-6387

204 Bessey Hall, 353-9089

Counseling Center Self-Management Lab, 355-8270

Olin Counseling Center – 345 Olin Health Center, 353-5310

Main Library – Career Collection, no appointment necessary

CHANGE OF ENROLLMENT/REGISTRATION

Students who wish to drop and add courses after registration may do so through the fifth day of classes. To add courses after the fifth day, students must contact the department offering the course (after the fifth day, students may continue to drop courses through the middle of the semester). After mid-term, students may drop courses only with the permission of the dean of their college. Students are reminded to check the University Calendar in the *Quick Guide to Enrollment and Registration* each semester for important dates regarding dropping and adding courses. Fees charged for late enrollment and fees refunded for dropping courses are also listed in the *Quick Guide to Enrollment and Registration*.

CORRECTION OF GRADES

A student's grade may be changed only if the first grade is in error. The time limit for the correction of grades is 30 days after the start of a new semester. The Office of the Registrar reserves the right to audit student records and to correct them as necessary.

DEFERRED GRADES

Deferred grades are issued only to graduate students who are doing satisfactory work but cannot complete class requirements because of reasons acceptable to the instructor. The required work must be completed and a grade reported within two calendar years. If not completed within the time limit, the DF/Deferred will be changed to a DF/U, which indicates that the student did not complete the required work within the given time limit.

FREQUENTLY USED WEBSITES AND PHONE NUMBERS

Controllers Office (www.ctrlr.msu.edu) - Tuition and housing fees, fee payment schedule, deferred payment plan, etc. 517-355-3343 (Billing and Receivables)

Department of Police and Public Safety (www.dpps.msu.edu)- Police services, parking permits, campus crime statistics, visitor parking, etc. 517-355-8440 (Parking)

Financial Aid (www.finaid.msu.edu)- Instructions for applying for aid, forms, calendar, calculator, etc. 517-353-5940

Graduate School (www.grad.msu.edu) - Graduate education at Michigan State University, forms, assistantship information, financial aid, graduate student resources, etc. 517-355-0301

Housing (www.hfs.msu.edu/uh/)- Graduate housing, University apartments, housing rates, food service, residential rental options, etc. 517-355-9550 (University Apartments and Hall Assignments)

Michigan State University (www.msu.edu) - General information about Michigan State University, catalogs (*Academic Programs* and *Descriptions of Courses*), enrollment and registration, student organizations, student services, University policies and procedures, search site, etc.

Office for International Students and Scholars (www.oiss.msu.edu) - Admission, travel, immigration rules and regulations, scholarship and grant information, etc. 517-353-1720

Registrar's Office (www.reg.msu.edu) - Tuition, enrollment, financial aid, schedule of courses, University calendar, student services, etc. 517-355-3300

GRADUATE ASSISTANTSHIPS

Graduate assistantships are awarded on a competitive basis for incoming masters and doctoral students. All assistantships are dependent on the availability of funds. They may be renewed if funds are available and the student is making satisfactory progress toward the degree and has received satisfactory evaluations from the supervising faculty member.

Students receiving these awards provide support for the School's teaching and research. The graduate assistant's responsibilities require 10 hours per week for a quarter-time appointment, 20 hours per week for a half-time appointment, and 30 hours per week for a three-quarter-time appointment. Graduate assistants are provided a monthly stipend, a nine-credit tuition waiver for each semester the assistantship is held (five-credit tuition waiver for summer semester), with in-state tuition rates for any credits above those waived, and student health insurance. Matriculation fees are waived.

Graduate assistants are expected to be on campus during the length of the appointment. Days off should be discussed with the student's supervisor well in advance, and makeup time scheduled. Appointment dates will be as follows:

Fall Semester – August 16 through December 31

Spring Semester – January 1 through May 15

Summer Semester – May 16 through August 15

There are three levels of stipend rates, which are determined by University regulation.

Level 1 – Graduate students who have earned their Bachelor's degree and have less than one year's experience as a graduate assistant. May teach, do research, or are assigned supervised assistant's duties such as reading and grading papers, proctoring exams, etc.

Level 2 – Graduate students who have earned their Masters degree or equivalent and/or two semesters' experience as a graduate assistant. May teach, do research, or perform administrative tasks with moderate supervision.

Level 3 – Graduate students who have earned their Masters degree or equivalent and at least two years' experience as a Graduate Assistant. May teach, do research, or perform administrative tasks with minimum supervision. Advancement to Level 3 is on a merit basis, with the above prerequisites being considered minimal.

Checks are distributed the 15th of the month. Changes in stipend or percentage of time become effective only at the beginning of a semester.

Support sources come in five main types:

Teaching assistantships eligible to join the Graduate Employees Union (TA)

Teaching assistantships not eligible to join the Graduate Employees Union (TE)

Research assistantships (RA)

MSU fellowships

External fellowships

Student offered a teaching assistantship (TA) must decide whether to join the Graduate Employees Union (GEU). Please visit www.geuatmsu.org for more information about the GEU. The student will be given a card on which to indicate their decision at the beginning of the first semester in which they are eligible to join. Dues-paying TAs need only sign a GEU card once (unless they wish to change to paying fees) during their graduate careers. Fees-paying TAs

need to sign a card once a year. *If a TA does not fill out a union card, the assistantship may be revoked.* TEs and RAs are not currently required to fill out this form.

Graduate assistants must be registered each semester in which they hold graduate assistantships. The minimum and maximum credit-loads are as follows:

1. For a quarter-time graduate assistant, minimum enrollment is 3 credits (including credits in CJ 999); maximum enrollment is 16 credits (excluding credits in CJ 999).
2. For a half-time graduate assistant, minimum enrollment is 3 credits (including credits in CJ 999); maximum enrollment is 12 credits (excluding credits in CJ 999).
3. For a three-quarter-time graduate assistant, minimum enrollment is 3 credits (including credits in CJ 999); maximum enrollment is 8 credits (excluding credits in CJ 999).

A more detailed description of assistantship benefits and regulations may be found in Michigan State University's *Academic Programs*, Financial Aid for Graduate Students section (available at <http://www.reg.msu.edu/read/UCC/Updated/gradedfinaid.pdf>), the Graduate School website at www.grad.msu.edu/prospect.htm, and at the end of this handbook under Forms and Publications.

MSU NETID

MSU students receive centrally funded NetIDs so they can utilize various electronic resources and electronic mail. Students should activate their MSU NetID even if they already have another email account. By setting up the MSU NetID, students can:

- Receive official communications from MSU that are sent to students by email only
- publish a personal webpage
- access dial-up services
- access public computer labs
- access electronic resources on campus

You will need your PID (Personal Identification Number) and your PAN (Personal Access Number) to activate your MSU NetID. Please visit www.netid.msu.edu for more information.

REQUIRED TRAINING AND IMMUNIZATION

Incoming Forensic Biology and Chemistry students must complete an online Chemical Hygiene and Laboratory Safety training at www.orcbs.msu.edu (choose Online Training to find the link).

Incoming Forensic Anthropology and Biology students must complete the Bloodborne Pathogens training, which will be arranged early in the first semester of studies.

Hepatitis B immunization series is required of Forensic Anthropology and Biology students. The immunization series can be obtained at Olin Health Center. Please call 517-353-9763 with questions.

STUDENT IDENTIFICATION CARD

Identification cards may be obtained in Room 50 Administration Building and will be issued following the student's initial enrollment. Picture ID is required. Library privileges, access to University buildings, facilities and classrooms, and purchase of tickets and entry into athletic and entertainment events may require the possession and presentation of the ID card upon request.

If you lose your ID card, contact the Registrar's Office immediately at 517-355-3300 and the Main Library at 517-355-2333. You are responsible for all materials checked out of the libraries with your ID card. The cost of replacement of a lost card is \$20, and the exchange of a damaged card is \$10 (no charge for the replacement of an electronically unreadable card that is not visibly damaged).

Questions concerning Michigan State University ID cards should be addressed to the Registrar's Office, 50 Administration Building, MSU, East Lansing, MI 48824; 517-355-3300.

TIME LIMIT

Although most students will take 1 ½ to 2 years to complete the requirements for the Masters degree, the time limit for degree completion is six years beginning with the first semester in which credit is earned toward the degree (Academic Programs 2002-04, Time Limit).

TRANSFER CREDITS

As many as nine semester credits of graduate course work (excluding research and thesis credits) from accredited institutions with Masters programs may be transferred to a student's Michigan State University academic record, with approval of the program.

WITHDRAWAL FROM THE UNIVERSITY

A student who wishes to withdraw from the university should contact the Office of Student Affairs, 201 Berkey Hall, in the College of Social Science. Students will be advised of the academic consequences of withdrawing and the method for applying for readmission. A "Voluntary Withdrawal" form must be completed and signed by the student.

Students may withdraw from the university through the 12th week of the semester. A student may withdraw before the middle of the semester without a grade reported. Withdrawal after the middle of the semester through the 12th week of the semester will result in a grade being reported. Please check the university calendar in your *Quick Guide to Enrollment and Registration* for specific dates.

In case of such emergency that a student is not able to report in person to the Office of Student Affairs, 201 Berkey Hall, an agent of the student (parent, partner or spouse) may contact Student Affairs personnel.

COURSE DESCRIPTIONS

ANP 441 – Osteology and Forensic Anthropology (4 credits) Human bone and skeletal biology and analysis. Methods of forensic anthropology. Analysis of skeletal remains, forensic pathology, and forensic archaeology. (Offered Spring of even years)

ANP 840 – Biocultural Evolution (3) Major contemporary issues in evolutionary theory, taxonomy, and the evolution of biology and culture. (Spring)

ANP 841 – Physical Anthropology (4) Controversies in biological anthropology. History of physical anthropology and current theoretical perspectives. Critical approaches to research design. (Spring of even years)

ANP 842 – Human Osteology (5) Human bone biology, skeletal anatomy, and osteological analysis. (Fall of even years)

ANP 844 – Topics in Forensic Anthropology (2) Survey of topics and current issues in forensic anthropology. Possible topics include facial reproduction and identification; laboratory techniques; skeletal histomorphology. (Fall)

ANTR 551 – Medical Gross Anatomy (6) Human regional gross anatomy with clinical correlations using prosections, cross-sections, medical imaging, multimedia and hypermedia. (Fall)

BMB 801 – Molecular Biology (3) Organization of genes. Regulation of gene expression, replication and recombination. (Fall)

CEM 835 – Advanced Analytical Chemistry II (3) Separations, molecular spectroscopy and mass spectrometry. (Spring)

CJ 805 – Survey in Forensic Science (3) Scientific analysis of physical evidence. The course will cover four major aspects of physical evidence using real criminal and civil cases: 1) generation of physical evidence by criminal activity; 2) collection and preservation of phys. evidence; 3) analysis of phys. evidence by forensic science laboratory; presentation of scientific expert testimony in court. (Fall)

CJ 817 – Law and Forensic Science (2) Course covers the legal aspects of forensic science including the adjudicative process, admissibility of scientific evidence, laboratory reports, hearsay, relevant case materials and expert testimony. (Spring)

CJ 819 – Forensic Analysis of Drugs and Alcohol (3) Techniques and processes in analysis of physical evidence including spectroscopy, chromatography, microscopy. Emphasis on controlled substances. (Fall)

CJ 820 – Forensic Chemistry and Microscopic Evidence (3) Continuation of CJ 819. Analysis of trace evidence including hairs and fibers, paints and coatings, explosives and fire residues, glass and soil. (Spring)

CJ 824 – Forensic Serology (3) Lectures and laboratory exercises in the identification of body fluids of forensic interest, including blood, semen, and saliva. Sources of false positive and negative results will also be examined. (Fall)

CJ 825 – DNA Profiling (3) Lectures and laboratory exercises in DNA profiling. Nuclear and mitochondrial DNA analysis of blood, semen, hair, saliva and other tissues of forensic interest. (Spring)

FRS 809 – Issues in Forensic Science (2-4) Forensic science research, practice, and legal practices. (Fall, Spring)

FRS 890 – Independent Study (1-6) Individual research and writing under faculty supervision. (Fall, Spring)

FRS 894 – Practicum (1-6) Observation, study, and work in selected forensic science agencies. (Fall, Spring, Summer)

FRS 899 – Masters Thesis Research (1-6) Planned research and writing directed by student's thesis committee. (Fall, Spring, Summer)

FW 828 – Conservation and Genetics (3) Population and evolutionary genetic principles applied to ecology, conservation, and management of species at the individual, population, and species level. May be taken in lieu of GEN 842. (Fall of even years)

GEN 842 (FOR 842) – Population Genetics (3) Population genetic processes underlying patterns of molecular genetic variation. Genealogical approaches to the study of genomic diversity, phylogenetic reconstruction, and molecular ecology. May be taken in lieu of FW 828. (Fall)

NSC 820 – Scanning Electron Microscopy/Energy Dispersive X-Ray Analysis (3) Use of scanning electron microscope and energy dispersive x-ray microanalysis. Machine variables, artifacts, quantitative analysis, specimen preparation, darkroom procedures. (Fall, Spring)

PHM 431 – Pharmacology of Drug Addiction (3) Introduction to pharmacology and neuropharmacology. Understanding of the biological basis for drug abuse and addiction. (Fall)

STT 464 – Statistics for Biologists I (3) Biological random variables. Estimation of population parameters. Testing hypotheses. Linear correlation and regression (prediction). Analyses of counted and measured data to compare several biological groups (contingency tables and analysis of variance). (Fall)