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**FORENSIC ANTHROPOLOGY PROGRAM**  
**GRADUATE STUDENT GUIDELINES**  
**2010-2011**

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**DEPARTMENT OF ANATOMY AND NEUROBIOLOGY**

**DIVISION OF GRADUATE MEDICAL SCIENCES**

**BOSTON UNIVERSITY SCHOOL OF MEDICINE**

Supplement to Boston University Division of Graduate Medical Sciences Guidebook

Approved: 08/2010

## **Guide for Masters Degree Candidates**

### **Faculty in Forensic Anthropology**

Program Director:	Tara L. Moore, Ph.D.
Associate Director:	Donald. F. Siwek. Ph.D.
Forensic Anthropologist:	Debra Prince Zinni, Ph.D., D-ABFA
Faculty Instructor:	William J. Powers, JD
Faculty Instructor:	Ronald J. Killiany, Ph.D
Faculty Instructor:	Gary Reinecke, SSA ret.
Adjunct Faculty:	Peter Cummings, MD
Adjunct Faculty:	Franklin Damann, MS
Adjunct Faculty:	Det. Lieut. Paul J. L'Italien
Adjunct Faculty:	Murray Marks, Ph.D, D-ABFA

### **Graduate Student Committee**

This committee directs and oversees the Forensic Anthropology Graduate Program within the Department of Anatomy and Neurobiology. Its responsibilities include but are not limited to: admission decisions, policy-making, the establishment of academic requirements, the resolution of disputes and curriculum development. The Committee consists of the Director of the Forensic Anthropology Graduate Program, the Associate Director of the Forensic Anthropology Graduate Program, the Thesis Research Coordinator and one other full-time faculty member.

All students will meet with the Graduate Student Committee in the summer of their first year. The purpose of this meeting will be to evaluate the student's overall performance in the program and to make plans for their final year.

### **Description of the MS Program**

#### **Coursework**

The program for the MS degree consists of the equivalent of approximately two years of fundamental course work, including laboratory-based course work and at least two semesters of thesis research work and a written thesis. Students may also complete internship, directed studies and/or field school opportunities as part of their graduate education. Candidates are required to complete a minimum of 42 credits at the graduate level and pass a competency examination. It is not uncommon though for students to complete additional course work, internship opportunities, directed studies and/or field school that will increase their overall number of credits by the time of graduation.

#### **Program Advisor**

Upon beginning the MS program, each student will be assigned a program advisor to assist him/her in selecting an appropriate course of study. Program advisors will be full-time faculty

members in the Forensic Anthropology Program and will approve and sign course registration forms, approve and assign grades for internships, and help students choose an appropriate thesis advisor by the end of the first year of study. Students are encouraged to meet with their advisor for a minimum of twice a year.

## **Grades**

To receive graduation credit in any course taken as part of the MS program, students must receive a grade of B- or higher. If a grade of C+ or lower (including grades of an “I” after one year) occurs in eight credit hours or more a student will be automatically dismissed from the Program.

When the work of a course has not been completed within the semester of registration due to extenuating circumstances, the grade of “I” may be issued at the discretion of the instructor. A grade of “I” can only be given if a student is currently passing the course. This automatically becomes a permanent grade of “I” (unsatisfactory grade) unless the course work is completed within the following academic year. “Incomplete” grades may not be changed after a period of one year from the time the original grade is recorded. Grades of “I” (after one year) and C+ or lower are interpreted as failures.

Multiple choice, true-false style questions are graded as correct or incorrect. Short answer, essay or other handwritten responses are graded by the professor as they indicate. If you are UNCLEAR about the grading rubric ask your instructor.

## **Grade Scale**

The following grading scale will be used in all courses in this program:

A	94+	C+	77-79
A-	90-93	C	74-76
B+	87-89	C-	70-73
B	84-86	D	61-69
B-	80-83	F	<60

## **Attendance**

Attendance is required in all courses. If a situation arises that requires a student to miss a scheduled class, the student must e-mail the instructor and inform them that they will miss class. Unanticipated or emergency absences will be considered individually. Unexcused absences will be penalized by subtraction of 1% from the final grade per absence. If you arrive late to a class BE SURE to sign the attendance sheet prior to leaving. Habitual lateness (more than three per course) will be penalized 1% from the final grade.

## Assignments

Each course will require specific writing assignments (including lab assignments) to be submitted during the semester by specified due dates. Late assignments will be accepted but will be penalized 1 point per day (including weekends) and no assignment (including lab assignments or casework) will be accepted after 10 days beyond the original due date.

## Requirements for the MS Degree

### Core Course Requirements

Students entering the program will be required to take the following core courses. Planning of the academic schedule shall be carried out in consultation with the student's program advisor.

GMS FA 705 Forensic Anthropology Techniques	.....3 Credits
GMS FA 706 Forensic Anthropological Procedures	.....3 Credits
GMS FA 710 Topics in Forensic Anthropology	.....2 Credits
GMS FA 712 Human Osteology	.....4 Credits
GMS FA 716 Expert Witness Testimony	.....2 Credits
GMS FA 718 Special Topics in FA: Outdoor Crime Scene Awareness	.....3 Credits
GMS FA 720 Internship in Forensic Anthropology	.....2 Credits
GMS FA 722 Anatomical Sciences for the Forensic Anthropologist	.....4 Credits
GMS FA 740 Seminar in Forensic Anthropology	.....2 Credits
GMS FA 755 Directed Study in Forensic Anthropology	.....2 Credits
GMS FA 760 Research in Anthropology	.....6 Credits
GMS FA 800 Field Methods in Forensic Anthropology Lab	.....2 Credits
GMS FA 802 Applied Forensic Anthropology	.....3 Credits
GMS FA 804 Experimental Design for Forensic Anthropology	.....2 Credits
GMS FA 806 Advanced Osteology	.....4 Credits

Students may transfer credits for any of the above courses if it is deemed that an equivalent and appropriate graduate level course has been successfully completed in the preceding three years at an accredited college or university. In order to obtain transfer credits, students must provide a course description, transcript and syllabus from the completed course. Students who receive a waiver for a core course must complete an elective course in its place. Requests to substitute an equivalent course for credit be submitted on the appropriate forms to the Graduate Student Committee.

### Recommended sequence of courses:

#### Year 1

##### Fall

GMS FA 710 Topics in Forensic Anthropology	2 Credits
GMS FA 712 Human Osteology	4 Credits

GMS FA 718 Special Topics in FA: Outdoor Crime Scene Awareness	3 Credits
1 – 2 elective courses	2-4 Credits

**Spring**

GMS FA 705 Forensic Anthropology Techniques	3 Credits
GMS FA 740 Seminar in Forensic Anthropology	2 Credits
GMS FA 722 Anatomical Sciences for the Forensic Anthropologist	4 Credits
1 – 2 elective courses	2-4 Credits

**Summer**

GMS FA 760 Research in Anthropology	6 Credits
GMS FA 804 Experimental Design for Forensic Anthropology	2 Credits
1 – 2 elective courses	2-4 Credits

**Year 2**

**Fall**

GMS FA 706 Forensic Anthropological Procedures	3 Credits
GMS FA 716 Expert Witness Testimony	2 Credits
GMS FA 800 Field Methods in Forensic Anthropology	2 Credits
1 – 2 elective courses	2-4 Credits

**Spring**

GMS FA 802 Applied Forensic Anthropology	3 Credits
GMS FA 806 Advanced Osteology	4 Credits
1 – 2 elective courses	2-4 Credits

**Elective Courses**

In addition to the core courses listed above, students will be required to complete their credit hours with courses offered by the Biomedical Forensic Sciences program, departments of Anthropology and Archaeology or any graduate courses offered by the Division of Graduate Medical Sciences or the Graduate School of Arts and Sciences. Course selection will be carried out in consultation with the student’s program advisor.

**Suggested Electives**

- GMS FA 708 Homicide Investigation .....2 Credits
- GMS FA 709 Medicolegal Death Investigation .....2 Credits
- GMS FA 711 Forensic Pathology.....3 Credits
- GMS FA 714 Human Identification .....2 Credits

• AN 551	Anthropology and Human Heredity.....	4 Credits
• AN 704	Proseminar: Contemporary Anthropological Theory .....	4 Credits
• AN 733	Human Population Biology.....	4 Credits
• AR 501	Graphics and Surveying for Archeology .....	4 Credits
• AR 503	Archeological Field Methods: Survey and Excavation .....	4 Credits
• AR 506	Regional Archeology & Geographical Information Sys.....	4 Credits
• AR 509	Geoarcheology .....	4 Credits
• AR 512	Laboratory and Field Methods in Archeology.....	2 Credits
• GRS AR 702	Contemporary Theory in Archeology .....	4 Credits
• GRS AR 780	Archeological Ethics and the Law .....	4 Credits

## Thesis and the Research Committee

### Research Committee

All MS candidates must complete a satisfactory program of laboratory or field work, the results of which are to be incorporated into a thesis. By the end of the first year (in the graduate program, each student **must** select a Research Committee in consultation with his/her program advisor. Research or work toward the thesis **WILL NOT BE ACCEPTED** without prior approval from the Research Committee. The Research Committee will consist of two Forensic Anthropology faculty members (full-time or adjunct). The student's program advisor may or may not be part of the Research Committee, depending on his/her area of specialty. Each student will choose a primary thesis advisor who will serve as the first reader and another faculty member who will be the second reader of the thesis. If one of the readers is not a full-time faculty member, the student must obtain a one-day special appointment in advance for that individual through the registrar's office.

The Research Committee will meet with the student at intervals of not more than two months once the student begins working on his/her research. **These meetings will be initiated and arranged by the student.** The Research Committee will consider the student's research plan, assist in implementing that plan and guide the writing process. The student should note that the two members of the Committee (first and second readers) must sign the finished thesis. Therefore, the student should seriously consider the advice of the Research Committee. **All deadlines for submission of thesis work and the required forms to the registrar's office are the responsibility of the student. Failure to meet these deadlines may require the student to register as a continuing student for an additional semester in order to complete their thesis.**

### Thesis Proposal

All students are required to submit a thesis proposal to the Thesis Research Coordinator by February 1<sup>st</sup> of their first year. Prior to preparing the proposal, students will meet with the Thesis Research Coordinator to develop an appropriate research topic. The proposal will be reviewed by the Graduate Student Committee and comments and suggestions will be given to the students by March 1<sup>st</sup>. The proposal will be further developed as part of the Experimental Design course offered in the Summer I semester. The FINAL version of the thesis proposal will be submitted to the Graduate Student Committee by July 1<sup>st</sup> of the student's first year.

## Thesis (Directed Research)

All thesis projects are laboratory or field-work based. Library theses are not acceptable. The body of the thesis document must be a **minimum of 65 double spaced pages in length**. The process of conducting research and writing a thesis requires approximately **8 -12 months to complete**. The thesis is **NOT** a term paper, library book review or a laboratory report. As a piece of scientific work it must include a clearly stated hypothesis or scientific question that is being addressed or investigated. The hypothesis or question should be related to laboratory/field experience. Students should be mindful of the significant time commitment involved in a field or laboratory based project, availability of instrumentation, supplies and chemical/biological standards as well as the availability of an appropriate faculty member for guidance.

All work must be properly cited in an accepted format. The reference list must include authors, year published, title of article, journal, volume and inclusive pages. References are listed alphabetically by author. The following provides examples of a suggested format for references:

Gilmore TD, White DW, Sarkar S and Sif S (1995) Malignant transformation of cells by the v-Rel oncoprotein. In, *The DNA Provirus: Howard Temin's Scientific Legacy* (Cooper GM, Greenberg-Temin R & Sugden B, eds), American Society for Microbiology, Washington DC, pp 109-128.

White DW and Gilmore TD (1993) Temperature-sensitive transforming mutants of the v-rel oncogene. *Journal of Virology* 67 6876-6881.

White DW, Roy A and Gilmore TD (1995) The v-Rel oncoprotein blocks apoptosis and proteolysis of I $\kappa$ B- $\alpha$  in transformed chicken spleen cells. *Oncogene* 10 857-868.

### AJPA Format:

Hanson CL, Owsley DW. 1980. Frontal sinus size in Eskimo populations. *Am J Phys Anthropol* 53:251-255.

### JFS Format:

(Numbered throughout text, not alphabetical in the references section.)

Albert AM, Maples WR. Stages of epiphyseal union for thoracic and lumbar vertebral centra as a method of age determination for teenage and young adult skeletons. *J Forensic Sci* 1995; 40(4):623 – 33.

All statements and facts that are not the student's own conclusions **MUST** be cited. The majority of citations **MUST** be from peer-reviewed journal articles. Textbook citations and personal communications should be limited to less than 5% of literature cited. Web sites and their documents (other than peer-reviewed journal reprints) are generally unsuitable as reference sources and as such are discouraged. Students must incorporate a minimum of **45 references** into their overall work. The complete set of formal requirements for a thesis available from the Division of Graduate Medical Sciences (*Research Guide for Writers of Theses and Dissertations*, prepared by Boston University's Mugar Memorial Library).

<http://gmsfile.bumc.bu.edu/pdfs/thesisgd.pdf>

A full draft of the thesis will be reviewed by both readers at least **twice** before it can be submitted to the graduate school. The readers must be allowed at least 2 weeks to read each draft and then return it with their suggestions for revision. **Students are expected to spend at least 8 - 12 months for the discussion of their thesis topic with their advisors, planning and implementing the research and writing the thesis.** Extensions are **NOT** provided if students do not meet graduate school deadlines. **It is the student's responsibility to obtain the deadlines for graduation for each semester from the registrar's office and to meet these deadlines.** It is highly recommended that the student frequently communicate with the appropriate advisors in regards to plans for the thesis and the proposed graduation date.

The first full draft of the thesis must be submitted to both readers at least **8 weeks prior** to the first draft deadline set by the registrar's office. The second draft of the thesis must be given to both readers at least **2 weeks prior** to the final deadline set by the registrar's office. Arrangements must be made to present one bound copy of the final thesis to the Departmental Library and one copy to the Forensic Anthropology Office. It is the responsibility of the student to initiate contact and meet with the Registrar, Millie Agosto (617-638-5124), to ensure the use of proper formatting in advance of all deadlines. **Failure to meet these deadlines will result in the student being required to register as a continuing student and pay the associated tuition fee for an additional semester.**

## **Internships and Field Schools**

Although not a requirement for graduation, students may decide to pursue an **approved** internship or a field school in a relevant setting. Students will be responsible for identifying their internship or field school with the assistance of the Graduate Student Committee. With approval from the Graduate Student Committee and the site supervisor, work completed at an internship or field school may be used as data and resources for the student's thesis. Students may receive 2 - 4 credits for their internship or field school at the discretion of the student's academic advisor, depending on the number of hours completed and the nature of the work completed during the internship or field school. A completed evaluation from the internship or field school supervisor describing the nature of the work completed and the quality of the student's performance is required. In addition, the student will be required to write an 8-10 page summary of their internship or field school experiences and responsibilities. The paper should include evidence of skills or knowledge gained during the internship or field school and the results of any experiments or research conducted. The evaluation (grade) for the internship or field school will be based upon the written paper, which will be graded by the student's program advisor, as well as input from the internship or field school supervisor. **It is the responsibility of the student to make sure the evaluation form and the written paper are turned in to his/her program advisor in order for a grade to be assigned.** Students who register for an internship or field school and fail to submit the required documents will receive a grade of "F".

## **Competency Exam**

A requirement for graduation from the MS program in Forensic Anthropology is successful completion of a competency exam. This examination consists of a written examination (series of multiple-choice questions) and a practical examination (hands-on laboratory exercises). Topics included on the examination will be Forensic Anthropology Techniques, Forensic Anthropological Procedures, Osteology, Ethics and Experimental Design. Specifically, questions on the examination will cover material from, but not limited to, the following courses:

**FA 705 – Forensic Anthropology Techniques**

**FA 706 – Forensic Anthropological Procedures**

**FA 710 – Topics in Forensic Anthropology**

**FA 712 – Human Osteology**

**FA 740 – Seminar in Forensic Anthropology**

Students will complete the examination in the second week of January of their second year in the program. The specific date being announced by October 1<sup>st</sup>. The examination will consist of a 4-hour written examination in the morning and a 4-hour practical examination on the following day.

In the event that a student does not pass one or both sections of the examination, the student will be provided with an additional opportunity to retake and pass the examination. If the Practical section of the repeat examination is failed, that is considered to be grounds for termination from the program. Should the student fail the second attempt at the written part of the examination, they will be provided a third opportunity to satisfy the requirement in the form of an interview. The graduate student committee in consultation with the student and the student's academic advisor will set the date and format of the re-examination(s). The grading of the exam follows the grading scale of the program (page 3).

## **Professional Organizations**

Students are strongly encouraged to join the American Academy of Forensic Sciences ([www.aafs.org](http://www.aafs.org)) and the American Association of Physical Anthropology ([www.physanth.org](http://www.physanth.org)) as well as other forensic professional organizations such as the International Association for Identification ([www.theiai.org](http://www.theiai.org)). Students are responsible for association fees.

## **Policy on Academic Honesty**

Boston University is committed to the principles of intellectual honesty and integrity. All members of the BU community are expected to maintain complete honesty in all academic work, presenting only that which is their own work in tests and assignments. Violating this policy will result in a failing grade for the assignment or test at issue. If a second violation occurs in association with any course in the Forensic Anthropology Program, the student will face a disciplinary hearing with the Graduate Student Committee and the Dean of Students will be notified. For complete details, please refer to the Boston University Code of Student

Responsibilities. If you have any questions regarding proper attribution of the work of others or additional academic honesty concerns, contact the instructor prior to submitting the work for evaluation.

## **Classroom Policies**

The nature of the material explored in this program is inherently delicate and it is of a deeply personal nature. While enrolled in this program it is expected that all students will adhere to the Boston University Code of Student Responsibilities. This document can be found here: <http://www.bu.edu/lifebook/university-policies/policies-code.html>. Students are expected to conduct themselves professionally and represent the program professionally. Human remains are sacred and never to be abused or handled in an inappropriate manner. Human remains must never be used to impress or thrill anyone at anytime. Violation of the appropriate decorum in working with these materials will be considered a serious infraction resulting in a disciplinary hearing and possible dismissal from the program. Photography of human remains for anything other than professional or school-related educational activities is forbidden.

To ensure a quality educational experience for all students and instructors we ask that students respect fellow students and instructors. To sustain an organized and meaningful learning environment you should make every effort to arrive on time for your classes, turn off cell phones/PDAs and provide your full attention to your instructors and fellow students. Students may **NOT** send or receive text messages or e-mail during class time. If an urgent situation does arise during class, please step out into the hallway to communicate.

## **Outdoor Research Facility**

The program in forensic anthropology operates an outdoor research that is available for use by students to conduct research projects to gather data for their thesis. The facility consists of 32 acres of land that includes wooded areas, small cranberry bogs and shaded areas. The number of research projects that can be conducted at the facility are limited and therefore students interested in conducting research projects at the facility must submit a written proposal to the graduate student committee that clearly and thoroughly describes the hypothesis, rationale and methods for the project. The graduate student committee will review all submitted proposal and decide which projects will be approved. The facility is located approximately 45 minutes west of Boston and **transportation to and from is the sole responsibility of the student.**

## **Photography**

Casual personal photography of activities, materials, classes, class material and above all decomposing remains of any sort is strictly forbidden. Research photography and videography IS permitted in the context of research and thesis purposes. Unauthorized imagery of any research activity or the facilities is viewed dimly and may carry disciplinary consequences pending investigation by the Program faculty.

STUDENTS ARE STRICTLY FORBIDDEN FROM PUBLISHING ANY MATERIALS RELATED TO THE PROGRAM ON THE INTERNET IN ANY FASHION WITHOUT EXPLICIT WRITTEN CONSENT OF THE PROGRAM FACULTY.

Students are expected to be sophisticated and discreet in their inevitable conversations about programmatic activities. Most people are uncomfortable with the idea of death and decomposition. It simply is impolite, inappropriate public conversation. Be mindful of your location when such conversations arise. Use your indoor voice and avoid unnecessarily graphic speech. Do NOT display osteological materials casually in public.

### **Background Checks**

While not required for entry into the graduate program, students should be aware that employment in a crime laboratory (government or private) or law enforcement agency typically requires successful completion of an extensive personal background check which may include a criminal history investigation, fingerprint check, polygraph examination and drug testing.



## Expectations and Code of Conduct

1. Attendance is required at all lectures, laboratory sessions and seminars and is calculated as part of your final grade in all courses. If extenuating circumstances do arise, you are required to notify your instructor as soon as possible.
2. Assignment due dates are described in each course syllabus or announced in class and must be followed. Late assignments will be penalized 1 point per day (including weekends) and late assignments will be **NOT** be accepted after 10 days beyond due date.
3. If you are encountering difficulties with a class or any of the material presented in the program, speak directly with the faculty member responsible for the material immediately. Please do not wait until the end of a course to discuss any difficulties with the material.
4. Professional and respectful behavior is required at all times in your communication and interactions with faculty, students and administrators.
5. Do not use cell phones, iPhones, Blackberry devices or other PDAs during class. This includes texts, e-mail messages and phone calls.
6. During your research and educational exercises at the outdoor research facility it may be necessary for you to take photographs of skeletal remains. **Under no circumstances are the pictures to posted or published on any internet site or other venue without written consent of program director.** Failure to comply with this regulation will result in dismissal from the University.



## STUDENT GUIDELINE CERTIFICATION

By signing below in the space indicated I certify that I have read this document fully and am aware of my responsibilities regarding the proper timing and conditions of the requirements for graduation from this program. Furthermore by signing I am indicating my agreement with the content of this document.

\_\_\_\_\_  
Student Printed Name

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Faculty Printed Name

\_\_\_\_\_  
Faculty Signature

\_\_\_\_\_  
Date