LEHMAN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

Department of Anthropology

Curriculum Change

Hegis #: 2202.00

Program Code: 02675

1. Type of change:

Change degree requirements for the <u>Interdepartmental Concentration in Anthropology</u> (Anthro/Bio/Chem) major <u>Track 1</u>.

2. From:

The required credits are divided into tracks:

Track I: for specializations in Physical Anthropology (such as Human Origins, Human Genetics, Human Growth, Human Adaptation, and Forensic Anthropology).

Track II: for specialization in Criminalistics and for premedical, predental, and preveterinary students; preprofessional students may take any three courses from MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. (See elective credits below.) Other students may only receive credit for one course in each sequence.

As an alternative to *ANT 322 or MAT 132, PSY 226 may be taken to satisfy the statistics requirement.

GRADUATING SENIORS OR RECENT GRADUATES IN THIS PROGRAM WHO HAVE BEEN ACCEPTED TO MEDICAL OR DENTAL SCHOOL ARE ELIGIBLE TO RECEIVE THE MAIZIE HIRSCH SCHOLARSHIP OF \$5,000. UP TO TWO OF THESE SCHOLARSHIPS MAY BE AWARDED ANNUALLY. FOR FURTHER INFORMATION, CONTACT THE PROGRAM COORDINATOR OR PREMED ADVISER.

A. Track I (60 credits)

Credits to be taken by all majors in Track I for specialization in Physical Anthropology:

35-39	In required courses as follows:	Credits	Hours
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6

8	In physical anthropology:		
	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
9	In chemistry:		
	CHE 114: Essentials of General Chemistry (Lecture)	3	3
	CHE 115: Essentials of General Chemistry (Laboratory)	1.5	3
	CHE 120: Essentials of Organic Chemistry (Lecture)	3	3
	CHE 121: Essentials of Organic Chemistry (Laboratory)	1.5	3
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data Quantitatively	3	3
	Or MAT 132: Basic Concepts of Probability and Statistics	4	4
	Or PSY 226: Statistical Methods in Psychology	4	4
7-10	[In physics:]		
	[PHY 166: General Physics I]	[5]	[6]
	[PHY 167: General Physics II]	[5]	[6]
	[Or in physics and history or philosophy of science:]		
	[PHY 135: Fundamental Concepts and Methods of Physics]	[4]	[5]
	[And one of the following:]		
	[HIS 301: Introduction to the History of Biology]	[3]	[3]
	[HIA 348: Introduction to the History of Science, from Ancient Science to the Scientific Revolution]	[3]	[3]
	[HIE 301: Introduction to the History of Science, from Descartes and Newton to Darwin and Einstein.]	[3]	[3]
	[PHI 353: Philosophy of Science]	[3]	[3]

Elective credits (21-25) to total at least 60 when added to the number of required credits taken. Students interested in Forensic Anthropology should include ANT 303 (Human

Osteology, 4.5 credits, 6 hours). Any course in the list that follows may be taken for elective credit.

B. Track II (60 credits)

Credits to be taken by all majors in Track II for specializations in Criminalistics or for premedical, predental, or preveterinary students majoring in Anthropology (Physical), Biology, and Chemistry.

In required courses as follows:	Credits	Hours
In biology:		
BIO 166: Introduction to Organismic Biology	4	6
BIO 167: Principles of Biology	4	6
In physical anthropology:		
ANT 171: Introduction to Human Evolution	4	5
ANT 269: Introduction to Human Variation	4	5
In chemistry:		
CHE 166: General Chemistry I	3	3
CHE 167: General Chemistry Laboratory I	2	4
CHE 168: General Chemistry II	3	3
CHE 169: General Chemistry Laboratory II	2	4
CHE 232: Organic Chemistry Lecture I	3	3
CHE 233: Organic Chemistry Laboratory I	2	4
CHE 234: Organic Chemistry Lecture II	3	3
CHE 235: Organic Chemistry Laboratory II	2	4
In quantitative methods:		
ANT 322: Analyzing Anthropological Data Quantitatively	3	3
Or MAT 132: Basic Concepts of Probability and Statistics	4	4
Or PSY 226:Statistical Methods in Psychology	4	4
	 In biology: BIO 166: Introduction to Organismic Biology BIO 167: Principles of Biology In physical anthropology: ANT 171: Introduction to Human Evolution ANT 269: Introduction to Human Variation In chemistry: CHE 166: General Chemistry I CHE 167: General Chemistry Laboratory I CHE 168: General Chemistry Laboratory I CHE 169: General Chemistry Laboratory II CHE 232: Organic Chemistry Laboratory I CHE 233: Organic Chemistry Laboratory I CHE 234: Organic Chemistry Laboratory II CHE 235: Organic Chemistry Laboratory II In quantitative methods: ANT 322: Analyzing Anthropological Data Quantitatively Or MAT 132: Basic Concepts of Probability and Statistics 	In biology:BIO 166: Introduction to Organismic Biology4BIO 167: Principles of Biology4In physical anthropology:4ANT 171: Introduction to Human Evolution4ANT 269: Introduction to Human Variation4In chemistry:3CHE 166: General Chemistry I3CHE 167: General Chemistry Laboratory I2CHE 168: General Chemistry Laboratory II2CHE 169: General Chemistry Laboratory II2CHE 232: Organic Chemistry Lecture I3CHE 233: Organic Chemistry Laboratory II2CHE 234: Organic Chemistry Laboratory II2In quantitative methods:3ANT 322: Analyzing Anthropological Data Quantitatively3Or MAT 132: Basic Concepts of Probability and Statistics4

Elective credits (20-21) to total at least 60 when added to the number of required credits taken. Any course in the list that follows may be taken for elective credit. Those interested in Criminalistics should take CHE 266 (Introduction to Forensic Science) and consider extra Chemistry courses. As noted above, students in this track only may also include MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. Preprofessional students may count any three of these courses, while other students may only receive credit for one course in each sequence.

3. <u>To</u>:

The required credits are divided into tracks:

Track I: for specializations in Physical Anthropology (such as Human Origins, Human Genetics, Human Growth, Human Adaptation, and Forensic Anthropology).

Track II: for specialization in Criminalistics and for premedical, predental, and preveterinary students; preprofessional students may take any three courses from MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. (See elective credits below.) Other students may only receive credit for one course in each sequence.

As an alternative to *ANT 322 or MAT 132, PSY 226 may be taken to satisfy the statistics requirement.

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A. Track I (60 credits)

Credits to be taken by all majors in Track I for specialization in Physical Anthropology:

35-39	In required courses as follows:	Credits	Hours
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6
8	In physical anthropology:		
	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
9	In chemistry:		
	CHE 114: Essentials of General Chemistry (Lecture)	3	3
	CHE 115: Essentials of General Chemistry (Laboratory)	1.5	3
	CHE 120: Essentials of Organic Chemistry (Lecture)	3	3
	CHE 121: Essentials of Organic Chemistry (Laboratory)	1.5	3
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data Quantitatively	3	3

	Or MAT 132: Basic Concepts of Probability and Statistics	4	4
	Or PSY 226: Statistical Methods in Psychology	4	4
7-10	In physics and scientific thought:		
	Option 1 (10 credits):		
	PHY 166: General Physics I	<u>5</u>	<u>6</u>
	PHY 167: General Physics II	<u>5</u>	<u>6</u>
	Or option 2 (8 credits):		
	PHY 166: General Physics I	<u>5</u>	<u>6</u>
	And one Scientific Thought course from Option 4		
	Or option 3 (7 credits):		
	PHY 135: Fundamental Concepts and Methods of Physics	<u>4</u>	<u>5</u>
	And one Scientific Thought course from Option 4		
	Or option 4 (9 credits):		
	Any three of these Scientific Thought courses:		
	HIS 301: Introduction to the History of Biology	<u>3</u>	<u>3</u>
	HIS 302: Science and Society	<u>3</u>	<u>3</u> 3 3
	HIS 304: History of Science in the Twentieth Century	<u>3</u>	<u>3</u>
	HIA 348: Introduction to the History of Science, from Ancient Science to the Scientific Revolution	<u>3</u>	<u>3</u>
	HIE 301: Introduction to the History of Science, from Descartes and Newton to Darwin and Einstein.	<u>3</u>	<u>3</u>
	MAT 135: Concepts and Uses of Mathematics	<u>3</u>	<u>4</u>
	CMP 108: Programming for Non-Computer Science Majors	<u>3</u>	<u>4</u> <u>3</u>
	PHI 353: Philosophy of Science	<u>3</u>	<u>3</u>
	SOC 310: Knowledge, Science, and Society	<u>3</u>	<u>3</u> 3

Elective credits (21-25) to total at least 60 when added to the number of required credits taken. Students interested in Forensic Anthropology should include ANT 303 (Human Osteology, 4.5 credits, 6 hours). Any course in the list that follows may be taken for elective credit.

B. Track II (60 credits)

Credits to be taken by all majors in Track II for specializations in Criminalistics or for premedical, predental, or preveterinary students majoring in Anthropology (Physical), Biology, and Chemistry.

39-40	In required courses as follows:	Credits	Hours
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6
8	In physical anthropology:		
	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
20	In chemistry:		
	CHE 166: General Chemistry I	3	3
	CHE 167: General Chemistry Laboratory I	2	4
	CHE 168: General Chemistry II	3	3
	CHE 169: General Chemistry Laboratory II	2	4
	CHE 232: Organic Chemistry Lecture I	3	3
	CHE 233: Organic Chemistry Laboratory I	2	4
	CHE 234: Organic Chemistry Lecture II	3	3
	CHE 235: Organic Chemistry Laboratory II	2	4
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data Quantitatively	3	3
	Or MAT 132: Basic Concepts of Probability and Statistics	4	4
	Or PSY 226:Statistical Methods in Psychology	4	4

Elective credits (20-21) to total at least 60 when added to the number of required credits taken. Any course in the list that follows may be taken for elective credit. Those interested in Criminalistics should take CHE 266 (Introduction to Forensic Science) and consider extra Chemistry courses. As noted above, students in this track only may also include MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. Preprofessional students may count any three of these courses, while other students may only receive credit for one course in each sequence.

4. Rationale:

This section of the ABC Track 1 degree requirements was developed towards the end of developing student's quantitative skills and understanding of basic scientific principles. When this portion of the ABC Track 1 requirements was initially instituted, the

courses listed in history and philosophy of science were regularly offered. In recent years, these courses have been rarely offered. As a result, the apparent choice in this section of the ABC Track 1 degree requirements is a mirage: the history and philosophy of science options are effectively impossible for most students to fulfill. Our ABC Track 1 students must either take PHY 166+167 or show the initiative to request and receive an A-1 authorization for some other course to fulfill the history and philosophy of science requirement. By expanding the list of acceptable courses that would fulfill this requirement, this proposal will re-enable a topic path through the ABC Track 1 requirements that has recently been very difficult for students to achieve. Secondarily, we have had a number of students who have begun the PHY 166+167 option but then realized after taking PHY 166 that this was not the best choice for them. Students cannot receive credit for both PHY 166 and PHY 135 (per Department of Physics course rules). We have generally offered these students A-1 authorization to substitute PHY 166 for PHY 135 in the physics and history or philosophy of science option. By expanding the course options in this section of the ABC Track 1 degree requirements, this proposal retains the core goals of this portion of the degree requirements while eliminating A-1 exceptions.

5. Date of Department Approval: May 3, 2011