



University Council

March 15, 2019

UNIVERSITY CURRICULUM COMMITTEE – 2018-2019

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Undergraduate Student Representative – Ali Elyaman

Graduate Student Representative – Chasity Tompkins

Dear Colleagues:

The attached proposal to make the following program changes in the College of Public Health will be an agenda item for the March 22, 2019, Full University Curriculum Committee meeting:

- Change the name of the major in Biostatistics (M.S., Ph.D.) to Epidemiology and Biostatistics (M.S, Ph.D.)
- Create a new Area of Emphasis in Biostatistics under the major in Epidemiology and Biostatistics (M.S, Ph.D.)
- Create a new Area of Emphasis in Data Analysis and Modeling under the major in Epidemiology and Biostatistics (M.S, Ph.D.)
- Create a new Area of Emphasis in Epidemiology under the major in Epidemiology and Biostatistics (M.S, Ph.D.)
- Terminate the major in Epidemiology (Ph.D.)

Sincerely,

John Maerz, Chair

University Curriculum Committee

cc: Interim Provost Libby V. Morris
Dr. Rahul Shrivastav

NAME CHANGE JUSTIFICATION FORM

1. **Date:** 12/4/2018

2. **School/College:** College of Public Health

3. **Department:** Epidemiology and Biostatistics

4. **Effective Term:** Fall 2020

Current Major Name: Biostatistics (M.S.)

Proposed Major Name: Epidemiology and Biostatistics (M.S.)

Current Major Name: Biostatistics (Ph.D.)

Proposed Major Name: Epidemiology and Biostatistics (Ph.D.)

Justification for Name Change:

Our department currently offers a Ph.D. in Epidemiology and a Ph.D. in Biostatistics. We want to streamline and update our departmental graduate degrees. We want to offer a single Ph.D. in Epidemiology and Biostatistics with three different areas of emphasis (Biostatistics, Epidemiology, Data Analysis and Modeling).

As such, we request to change the name of the Ph.D. in Biostatistics to Ph.D. in Epidemiology and Biostatistics, to correspond to the name of our department.

Also part of this request is to apply equivalent changes to the M.S. program such that we end up with a single M.S. in Epidemiology and Biostatistics with the above mentioned three areas of emphasis.

Any students currently enrolled in one of our current degrees have the option of finishing their degree under either the new or currently existing rules.

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Public Health
2. **Department/Division:** Epidemiology and Biostatistics
3. **Program:** Epidemiology and Biostatistics (M.S.)
4. **Area of Emphasis Title:** Biostatistics
5. **Proposed Starting Date:** Fall 2020

6. Area of Emphasis Description:

Required for the Biostatistics Area of Emphasis (11 hours):

- BIOS 8020, Linear and Generalized Linear Models (3 hours)
- BIOS 8200, Biostatistical Consulting I (2 hours)
- STAT 6510, Mathematical Statistics I (3 hours)
 - Possible substitution: STAT 6810, Probability Distributions
- STAT 6520, Mathematical Statistics II (3 hours)
 - Possible substitution: STAT 6820, Statistical Interference

7. Major Requirements: Students will complete a minimum of 36 hours.

Required (18 hours):

- BIOS 7300, Master Thesis (3 hours)
- BIOS 7400, Research Data Management and Computing (3 hours)
- BIOS 8010, Regression and Analysis of Variance (3 hours)
- EPID 7000, Master's Research (3 hours)
- EPID 7020, Introduction to Epidemiology II (3 hours)
- BIOS 9100, Biostatistics Graduate Seminar (2x 1 hour)
- EPID 7800, Fundamentals of Public Health Ethics (1 hour)

Electives (7+ hours):

- Any EPID or BIOS class or (with permission of advisor or program director) any other appropriate 7000/8000 graduate-level class. Taking further electives is encouraged.

Additional coursework:

- As per UGA rules, a student who receives any level of support or is assigned teaching duties has to take a section of GRSC 7770, Graduate Teaching Seminar. This course does not count toward the 36-hour program requirement.

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Public Health
2. **Department/Division:** Epidemiology and Biostatistics
3. **Program:** Epidemiology and Biostatistics (M.S.)
4. **Area of Emphasis Title:** Data Analysis and Modeling
5. **Proposed Starting Date:** Fall 2020
6. **Area of Emphasis Description:**

Required for Data Analysis and Modeling (11 hours):

- BIOS 8020, Linear and Generalized Linear Models (3 hours)
- BIOS 8200, Biostatistical Consulting I (2 hours)
- EPID 7500, Introduction to Coding in R, Data Science and Simulation for Public Health and the Life Sciences (3 hours)
- EPID(BIOS) 8060, Modern Applied Data Analysis (3 hours)

7. **Major Requirements:** Students will complete a minimum of 36 hours.

Required (18 hours):

- BIOS 7300, Master Thesis (3 hours)
- BIOS 7400, Research Data Management and Computing (3 hours)
- BIOS 8010, Regression and Analysis of Variance (3 hours)
- EPID 7000, Master's Research (3 hours)
- EPID 7020, Introduction to Epidemiology II (3 hours)
- BIOS 9100, Biostatistics Graduate Seminar (2x 1 hour)
- EPID 7800, Fundamentals of Public Health Ethics (1 hour)

Electives (7+ hours):

- Any EPID or BIOS class or (with permission of advisor or program director) any other appropriate 7000/8000 graduate-level class. Taking further electives is encouraged.

Additional coursework:

- As per UGA rules, a student who receives any level of support or is assigned teaching duties has to take a section of GRSC 7770, Graduate Teaching Seminar. This course does not count toward the 36-hour program requirement.

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Public Health
2. **Department/Division:** Epidemiology and Biostatistics
3. **Program:** Epidemiology and Biostatistics (M.S.)
4. **Area of Emphasis Title:** Epidemiology
5. **Proposed Starting Date:** Fall 2020

6. Area of Emphasis Description:

Required for Epidemiology Area of Emphasis (12 hours):

- BIOS 7020, Introductory Biostatistics II (3 hours)
- EPID 7410, Principles and Methods of Field Epidemiology I (3 hours)
- EPID 8010, Cohort Study Design, Implementation, and Analysis (3 hours)
- EPID 8020, Case-Control Study Design, Implementation, and Analysis (3 hours)

7. Major Requirements: Students will complete a minimum of 36 hours.

Required (18 hours):

- BIOS 7300, Master Thesis (3 hours)
- BIOS 8010, Regression and Analysis of Variance (3 hours)
- EPID 7000, Master's Research (3 hours)
- EPID 7020, Introduction to Epidemiology II (3 hours)
- BIOS 7400, Research Data Management and Computing (3 hours)
- BIOS 9100, Biostatistics Graduate Seminar (2x 1 hour)
- EPID 7800, Fundamentals of Public Health Ethics (1 hour)

Electives (6+ hours):

- Any EPID or BIOS class or (with permission of advisor or program director) any other appropriate 7000/8000 graduate-level class. Taking further electives is encouraged.

Additional coursework:

- As per UGA rules, a student who receives any level of support or is assigned teaching duties has to take a section of GRSC 7770, Graduate Teaching Seminar. This course does not count toward the 36-hour program requirement.

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Public Health
2. **Department/Division:** Epidemiology and Biostatistics
3. **Program:** Epidemiology and Biostatistics (Ph.D.)
4. **Area of Emphasis Title:** Biostatistics
5. **Proposed Starting Date:** Fall 2020

6. Area of Emphasis Description:

Required for Biostatistics Area of Emphasis (17 hours):

- BIOS 8040, Advanced Biostatistics (3 hours)
- BIOS 8200, Biostatistical Consulting I (2 hours)
- BIOS 8310, Advanced Biostatistical Inference (3 hours)
- BIOS 8320, Asymptotic Biostatistical Inference (3 hours)
- STAT 6810, Probability Distributions (3 hours)
- STAT 6820, Statistical Inference (3 hours)

7. Major Requirements:

- BIOS 8010, Regression and Analysis of Variance (3 hours)
- BIOS 8020, Linear and Generalized Linear Models (3 hours)
- BIOS 8030, Longitudinal Data Analysis (3 hours)
- EPID 8010, Cohort Study Design, Implementation, and Analysis (3 hours)
- EPID 8020, Case-Control Study Design, Implementation, and Analysis (3 hours)
- EPID 9000, Doctoral Research or BIOS 9000, Doctoral Research (12+ hours)
- EPID 9100, Epidemiology Doctoral Seminar (2x 1 hour)
- EPID 9300, Doctoral Dissertation or BIOS 9300, Doctoral Dissertation (3+ hours)
- EPID 7800, Fundamentals of Public Health Ethics (1 hour)
- GRSC 7770, Graduate Teaching Seminar (3 hours)

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Public Health
2. **Department/Division:** Epidemiology and Biostatistics
3. **Program:** Epidemiology and Biostatistics (Ph.D.)
4. **Area of Emphasis Title:** Data Analysis and Modeling
5. **Proposed Starting Date:** Fall 2020

6. Area of Emphasis Description:

Required for Data Analysis and Modeling Area of Emphasis (11 hours):

- BIOS 7400, Research Data Management and Computing (3 hours)
- BIOS 8200, Biostatistical Consulting I (2 hours)
- EPID 7500, Introduction to Coding in R, Data Science and Simulation for Public Health and the Life Sciences (3 hours)
- EPID(BIOS) 8060, Modern Applied Data Analysis (3 hours)

7. Major Requirements:

- BIOS 8010, Regression and Analysis of Variance (3 hours)
- BIOS 8020, Linear and Generalized Linear Models (3 hours)
- BIOS 8030, Longitudinal Data Analysis (3 hours)
- EPID 8010, Cohort Study Design, Implementation, and Analysis (3 hours)
- EPID 8020, Case-Control Study Design, Implementation, and Analysis (3 hours)
- EPID 9000, Doctoral Research or BIOS 9000, Doctoral Research (12+ hours)
- EPID 9100, Epidemiology Doctoral Seminar (2x 1 hour)
- EPID 9300, Doctoral Dissertation or BIOS 9300, Doctoral Dissertation (3+ hours)
- EPID 7800, Fundamentals of Public Health Ethics (1 hour)
- GRSC 7770, Graduate Teaching Seminar (3 hours)

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Public Health
2. **Department/Division:** Epidemiology and Biostatistics
3. **Program:** Epidemiology and Biostatistics (Ph.D.)
4. **Area of Emphasis Title:** Epidemiology
5. **Proposed Starting Date:** Fall 2020

6. Area of Emphasis Description:

Required for Epidemiology Area of Emphasis (12 hours):

- EPID 8040, Clinical Trial Methods, Implementation, and Analysis (3 hours)
- EPID 8050, Integrated Research Design (3 hours)
- EPID(GRNT) 8400, Epidemiology of Chronic Disease (3 hours)
- EPID 8500, Infectious Disease Epidemiology (3 hours)

7. Major Requirements:

- BIOS 8010, Regression and Analysis of Variance (3 hours)
- BIOS 8020, Linear and Generalized Linear Models (3 hours)
- BIOS 8030, Longitudinal Data Analysis (3 hours)
- EPID 8010, Cohort Study Design, Implementation, and Analysis (3 hours)
- EPID 8020, Case-Control Study Design, Implementation, and Analysis (3 hours)
- EPID 9000, Doctoral Research or BIOS 9000, Doctoral Research (12+ hours)
- EPID 9100, Epidemiology Doctoral Seminar (2x 1 hour)
- EPID 9300, Doctoral Dissertation or BIOS 9300, Doctoral Dissertation (3+ hours)
- EPID 7800, Fundamentals of Public Health Ethics (1 hour)
- GRSC 7770, Graduate Teaching Seminar (3 hours)

DEACTIVATION OR TERMINATION OF A GRADUATE DEGREE PROGRAM

1. **Date:** 12/4/2018
2. **School/College:** College of Public Health
3. **Department:** Epidemiology and Biostatistics
4. **Program:** Epidemiology (Ph.D.)
5. **Deactivation or Termination:** Termination
6. **Last date students will be admitted to this program:** Fall 2020
7. **Last date students will graduate from this program:** 2023 (expected)
8. **Abstract of the deactivated or terminated program:**

Our department currently offers a Ph.D. in Epidemiology and a Ph.D. in Biostatistics. We want to streamline and update our departmental graduate degrees. We want to offer a single departmental Ph.D. in Epidemiology and Biostatistics with three different areas of emphasis (Biostatistics, Epidemiology, Data Analysis and Modeling). As such, we request to terminate the Ph.D. in Epidemiology.

The proposal to create areas of emphasis is part of this requested termination and name change proposal.

Also part of this request is a request to change the name of the Ph.D. in Biostatistics to Ph.D. in Epidemiology and Biostatistics, to correspond to the name of our department, and a request to apply equivalent changes to the M.S. in Biostatistics program such that we end up with a single M.S. in Epidemiology and Biostatistics with the above mentioned three areas of emphasis.

Students currently in the program will be allowed to choose if they want to finish according to the existing rules for the Ph.D. in Epidemiology or follow the new rules for the Epidemiology area of emphasis under the updated Ph.D. in Epidemiology and Biostatistics.

We do not expect the termination of this degree to affect any current or future students, courses offered, or faculty/staff in any negative way. Instead, we expect that our modification of the Ph.D. program will lead to increased enrollment and strengthening of our departmental program.

Approvals on File

Proposal: Proposal for the following program changes in the College of Public Health:

Change the name of the major in Biostatistics (M.S., Ph.D.) to Epidemiology and Biostatistics (M.S., Ph.D.)

Create a new Area of Emphasis in Biostatistics under the major Epidemiology and Biostatistics (M.S., Ph.D.)

Create a new Area of Emphasis in Data Analysis and Modeling under the major Epidemiology and Biostatistics (M.S., Ph.D.)

Create a new Area of Emphasis in Epidemiology under the major Epidemiology and Biostatistics (M.S., Ph.D.)

Terminate the major in Epidemiology (Ph.D.)

College: College of Public Health

Department: Epidemiology and Biostatistics

Proposed Effective Term: Fall 2019

School/College:

- Department of Epidemiology and Biostatistics Department Head, Dr. Jose Cordero, 12/4/2018
- College of Public Health Interim Dean, Dr. Marsha Davis, 12/4/2018

Graduate School:

- Graduate School Dean, Dr. Suzanne Barbour, 2/15/2019