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**Summary of Work: Equity-Methods Curriculum TA**

Department of Epidemiology, University of North Carolina at Chapel Hill

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## DISCLAIMERS

This report has been edited for external sharing and distribution. A more detailed version of this report was provided to Department of Epidemiology leadership on April 18<sup>th</sup>, 2022. The current revised version was created in November 2022. Questions regarding this report and the on-going work can be directed to the Director of Graduate Studies Committee (GSC), currently Dr. Brian Pence ([bpence@unc.edu](mailto:bpence@unc.edu)).

The materials herein reflect the work and thoughts of the author [RAM Martinez, MSPH], and are not necessarily reflective of all members of the Department of Epidemiology at University of North Carolina at Chapel Hill, the author's affiliations (e.g., Carolina Population Center), or within Department committees or governing bodies (e.g., Epidemiology Inclusive Excellence Committee [eIEC] or Graduate Studies Committee [GSC]). Specifically, the reflections on Department structure (beginning pg. 3) and the approach (beginning pg. 9) are the author's own opinions.

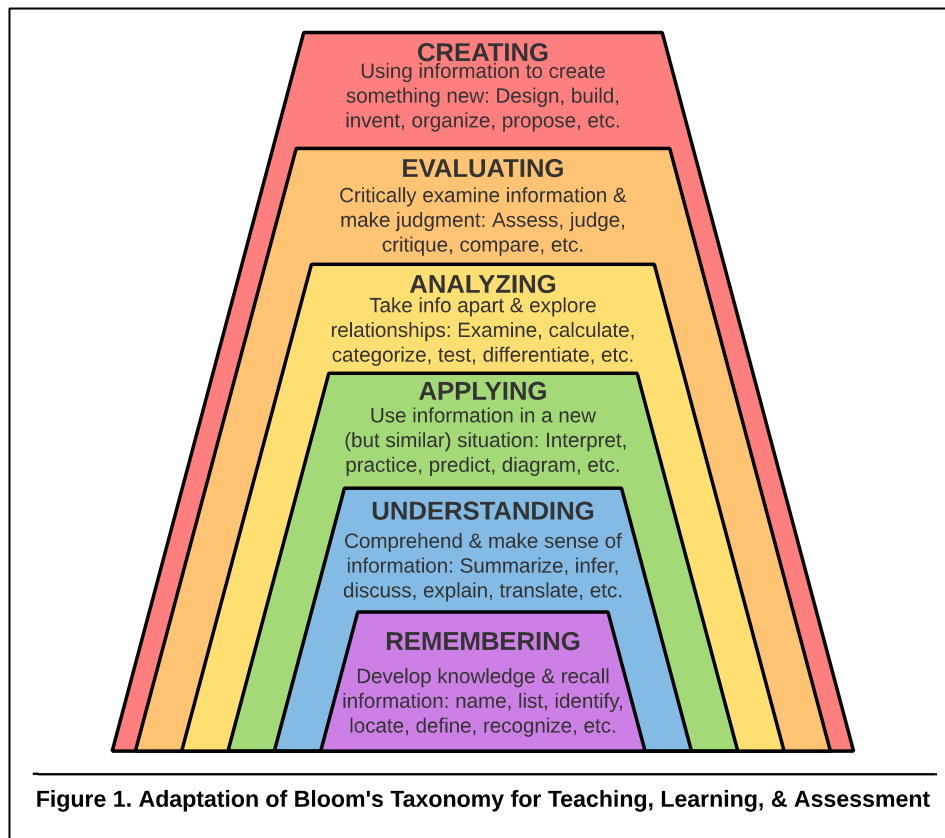
# BACKGROUND

## General Structure of the Department of Epidemiology’s Core Methods Curriculum.

The Department of Epidemiology’s methods curriculum has been described as operating within a “multiple coats of paint” framework, where students receive core training in first semester courses and in each subsequent course a “new layer of paint” is applied, deepening and enriching students understanding of a topic. For example, perhaps every methods course includes content on effect measure modification (EMM), but always in a way that is building upon prior knowledge. The required Epidemiology Core Methods Courses, as stated in the 2021-2022 Department of Epidemiology Academic Policies,<sup>1</sup> include:

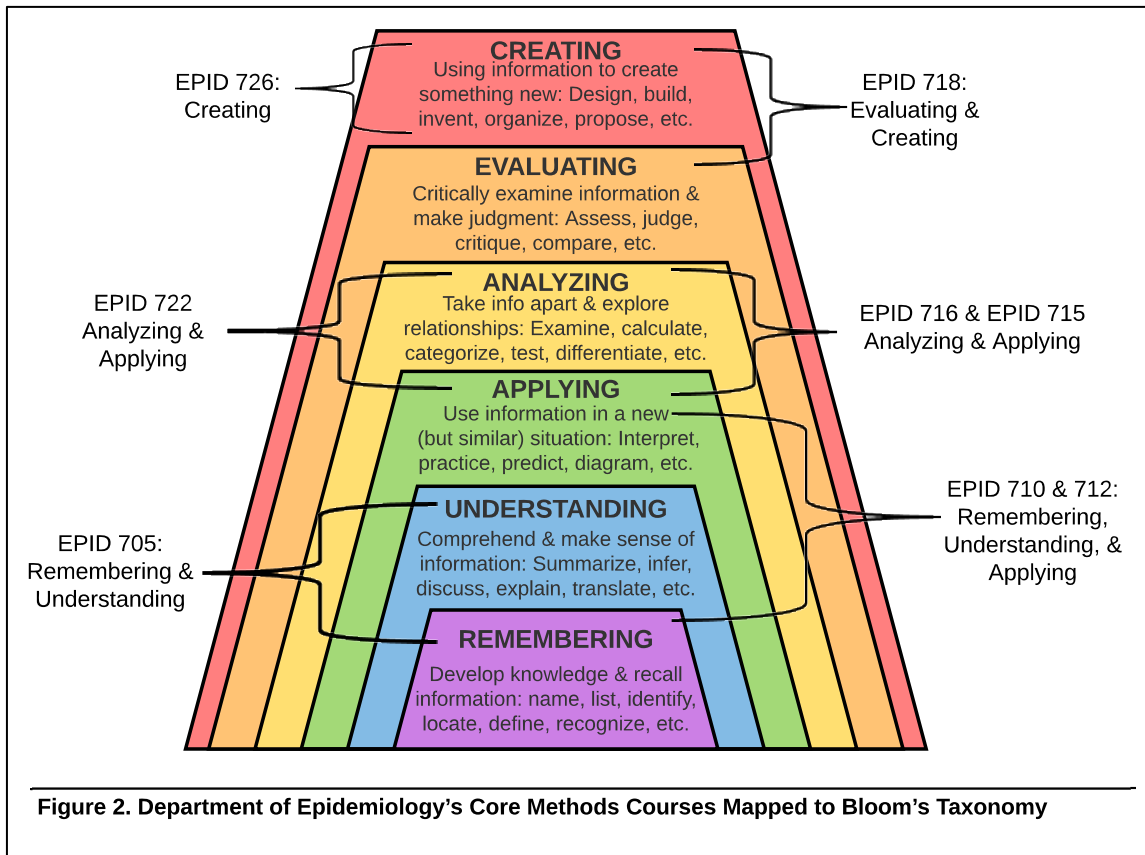
- EPID 700: SAS and Data Management ..... typically taken in: Year 1, semester 1
- EPID 705: Introduction to Deductive and Probability Logic in Epidemiology Year 1, semester 1
- EPID 710: Fundamentals of Epidemiology ..... Year 1, semester 1
- EPID 712: Readings in Fundamentals of Epidemiology\* ..... Year 1, semester 1
- EPID 715: Theory & Quantitative Methods in Epidemiology ..... Year 1, semester 2
- EPID 716: Epidemiologic Data Analysis ..... Year 1, semester 2
- EPID 718: Analytic Methods in Observational Epidemiology ..... Year 2, semester 1
- EPID 722: Epidemiologic Analysis of Time-to-Event Data ..... Year 2, semester 2
- EPID 726: Epidemiology Research Methods ..... Year 3, semester 1

**Figure 1** is an adapted schematic of Bloom’s Taxonomy for Teaching, Learning, & Assessment (2001) [originally developed in 1965], which was developed to categorize the levels of reasoning or cognitive skills students use for effective learning. Each level builds upon and encompasses the others. All of these levels can be present in a single lecture, assignment, or course.



<sup>1</sup>Historically, EPID 712 “Readings in Fundamentals of Epidemiology” was encompassed in EPID 710 as the “lab” component of the course. The separation of EPID 712 into its own course first implemented during the 2021-2022 Academic Year. These courses will be addressed together throughout the report as a pair.

Bloom's Taxonomy can also be broadly applied to illustrate the structure and function of the Department of Epidemiology's methods curriculum under the "multiple coats of paint" framework. In Figure 2, the core methods courses have been mapped to different levels of Bloom's Taxonomy.<sup>†</sup> First semester courses (e.g., EPID 700, EPID 705, and EPID 710), instill core knowledge on study designs, effect measures, and causal inference. These courses rely on core or inner level of Bloom's Taxonomy. For example, lectures, assignments, and examinations ask students to identify the characteristics of various study designs ("Remembering") or explain the core principles of causal inference ("Understanding"). In second semester courses, students begin to apply prior principles in the completion of highly structured analysis over the course of the semester (e.g., EPID 716) or in a variety of special case scenarios (e.g., EPID 715). Later courses may introduce new principles and return to the inner levels of Bloom's Taxonomy, but the emphasis of the overall course is on the application and analysis of new scenarios.



### State of the Curriculum Prior to the 2017-2018 Academic Year.

Prior to the 2017-2018 academic year, there was no direct discussion of race-racism, ethnicity-ethnocentrism, or other social-structural determinants of health in the core methods curriculum. Instead, such subject matter was relegated to courses and journal clubs primarily within the social epidemiology program area. However, all first- and second-year students, regardless of program areas, were asked to (re)code racial and ethnic data, use racial and ethnic variables in analyses, and interpret race and ethnicity specific findings as a part of assignments throughout core methods courses.

<sup>†</sup>Disclaimer: There may be disagreement about the exact categorization of the epidemiology methods curriculum within the taxonomy; this is not meant to be reductive or dismissive to different courses. However, under the "multiple coats of paint" framework, some course center different taxonomy levels over others.

Thus, in requiring all students to use racial and ethnic data without explicit, direct discussion, the core methods curriculum operated on numerous, unspoken embedded assumptions. Such as:

- The “scientific relevancy” of race and ethnicity to epidemiologic analyses is clear and universally understood by all in the department
- What race and ethnicity are and are not is universally understood across person, place, and time
- The number of and boundaries between racial groups is universally known and constant over place and time
- The theoretical or ethical implications of collapsing racial and/or ethnic groups together in coding are clear and understood

This further created a situation in which students from historically marginalized racial and ethnic groups were called upon to do additional intellectual and emotional labor by informally educating their peers and faculty, as well as correcting problematic assumptions.

### **2017-2018 & 2018-2019 Academic Years: First Generation Changes.**

In response to growing student concerns regarding the treatment of social-structural determinants in the core methods curriculum, the social epidemiology and core methods faculty met in Fall 2017 to discuss how the core courses could improve teaching on the specification and interpretation of race, ethnicity, and gender variables. A suggestion was made to invite in social epidemiology faculty into the core methods courses as guest lecturers. This resulted in a number of invited talks across the core methods courses in the following two years.

An incomprehensive list of guest lectures:

- “Quasi-experimental Designs” presented by Dr. Asia Maselko in EPID 710 [2017, 2018, 2019]
- “Development and reliability of the TPRS (Telephone-Administered Perceived Racism Scale)” presented by Dr. Anissa Vines in EPID 710 [2017, 2018, 2019]
- “Race in Epi Research” presented by Dr. Whitney Robinson in EPID 710 [2017, 2018]
- Discussion of neighborhoods and health facilitated by Dr. Allison Aiello in EPID 718 [2017]<sup>‡</sup>
- “Socioeconomic Position” presented by Dr. Allison Aiello and “Race & Ethnicity” presented by Rae Anne Martinez in EPID 710<sup>§</sup> [2019]

However, this approach lacked long-term sustainability and placed a high burden on the small number of social epidemiology faculty. The ability to include lectures on social-structural determinants were contingent upon guest lecturer availability and bandwidth year-to-year. In some courses, the guest lectures were planned for the final weeks of the semester and students were not held accountable to guest lecture material on exams or assignments. While students were being exposed to these topics, the timing of the lectures and lack of accountability to the material perpetuated a culture that social-structural determinants and other equity-related topics were “specialty issues” and not of high importance department-wide.

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<sup>‡</sup> Discussion provided greater context to the following paper and considerations of structural positivity: Messer LC, Oakes JM, Mason S. Effects of socioeconomic and racial residential segregation on preterm birth: a cautionary tale of structural confounding. *Am J Epidemiol* 2010;171(6):664-73. DOI: 10.1093/aje/kwp435.

<sup>§</sup> This was a single, shared class session; Dr. Aiello and Rae Anne Martinez each had 25-30 minutes to present on their respective topic.

## 2019-2020 & 2020-2021 Academic Years: Second Generation Changes.

In response to continued tensions, equity-focused units were developed and introduced independently into core methods courses. The development of these materials was mostly led by students with the intent that the materials would transition to be facilitated by the faculty teaching team or lead faculty in future years.

- Fall 2019 – 1 class session introduced into EPID 718; created by Rae Anne Martinez\*\* with assistance from Brooke Staley\*\* under the direction of Drs. Brian Pence and Steve Marshall.
- Spring 2020 – 2 class sessions introduced into EPID 716; created by Esther Chung\*\*, Kate LeMasters\*\*, and Dr. Maya Wright†† under the direction of Dr. Christy Avery.
- Fall 2020 – 2 class sessions and a lab section introduced into EPID 710; created by Drs. Daniel Westreich and Evans Lodge.††
- Fall 2020 - the single class session in EPID 718 was expanded into a 5-class session unit; expanded materials were created by or with input from Dr. Whitney Robinson, Dr. Alex Keil, Dr. Brian Pence, LáShauntá Glover\*\*, Rae Anne Martinez, & Brooke Staley.
- Fall 2020 – the “*Race and Ethnicity in Epidemiologic Methods Matrix*” was collaboratively developed by students who worked to develop and revise 2<sup>nd</sup> generation equity-focused materials. The matrix and accompanying “call to action” letter were submitted to Department leadership in December. Please see [Appendix B](#) for more details on the Matrix.
- Spring 2021 – the prior 2 EPID 716 class sessions were revised by Dr. Christy Avery.
- Spring 2021 – the “*Race and Ethnicity in Epidemiologic Methods Matrix*” was discussed during the February Graduate Studies Committee (GSC) meeting.

Student Cohort	2018		2019		2020		2021
	Fall	Spring	Fall	Spring	Fall	Spring	Fall
2017	E 710	E 716	E 718	E 722			
	E 705	E 715					
2018			E 710	E 716	E 718	E 722	
			E 705	E 715			
2019				E 710	E 716	E 718	E 722
				E 705	E 715		
2020						E 710	E 716
						E 705	E 715

  1st generation  
  2nd generation

**Figure 3. Timeline of Changes to the Department of Epidemiology's Core Methods Curriculum**

As these units were developed independently from one another, they focused on very similar, if not the same, learning objectives. The materials introduced across courses were all “level setting;” returning to Bloom’s Taxonomy, the learning objectives and discussions centered “Remembering” and “Understanding” (i.e., the lower levels of the taxonomy). For later methods sequence courses, this meant that the equity units were disjoint from the more natural level of the course or rest of the course materials. The materials also leaned on a highly similar set readings and, in some cases, borrowed slides from the same lecture. This made the equity-related content in the core methods courses EPID

\*\* Current student. Rae Anne Martinez: MSPH-PhD program, entered 2016; Brooke Staley: PhD program, entered 2017; Esther Chung: PhD program, entered 2018; Kate LeMasters: PhD program, entered 2018; LáShauntá Glover: PhD program, entered 2018.

†† Former student; now graduated. Maya Wright: PhD program, entered 2017; Evans Lodge: PhD-MD program, entered 2018.

710, EPID 716, and EPID 718 highly repetitive, which students from the 2019 and 2020 cohorts expressed in end of year course reviews.

Learning objectives shared across independent materials:

- Define and distinguish race and ethnicity
- Discuss why race and ethnicity are social and not biological constructs, and why they are poor proxies for genetic ancestry
- Recognize race and ethnicity can be operationalized into multiple measures
- Define racism
- Discuss the history of racism in the United States and the continued impacts on health

Shared readings across independent materials:

Ward et al. How do we assess a racial disparity in health? Distribution, interaction, and interpretation in epidemiological studies. *Annals of Epidemiol.* 2019;29:1-7.

- Primary reading in: EPID 710 (Fall 2020), EPID 716 (Spring 2020), EPID 718 (Fall 2020)
- Secondary resource in: EPID 715

Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. *The Lancet.* 2017;389(10077):1453-1463. doi:10.1016/s0140-6736(17)30569-x

- Primary reading in: EPID 710 (Fall 2020), EPID 718 (Fall 2020)

Roth, W. The multiple dimensions of race. *Ethnic and Racial Studies.* 2016;39(8):1310-1338.

- Primary reading in: EPID 718 (Fall 2019, Fall 2020)
- Secondary resource in: EPID 716 (Spring 2020), EPID 710 (Fall 2020)

## SCOPE OF WORK

The combination of many factors led the Department of Epidemiology administration to create a new, funded Teaching Assistant (TA) position, the “Equity Methods Curriculum TA” to address outstanding issues across the full methods sequence. The primary goal of the Equity-Methods Curriculum TA was to identify opportunities to strategically layer and integrate concepts of health equity and anti-racism into the existing material students experience as they advance through the curriculum. Rather than adding standalone lectures and perhaps repetitive content to each course, equity content should progressively build across courses in the Department of Epidemiology. The specific courses targeted for review were:

EPID 710: Fundamentals of Epidemiology  
EPID 715: Theory & Quantitative Methods in Epidemiology  
EPID 716: Epidemiologic Data Analysis  
EPID 718: Analytic Methods in Observational Epidemiology  
EPID 722: Epidemiologic Analysis of Time-to-Event Data

The specific goals of the position were:

1. Support integration of equity concepts in the core methods curriculum.
  - a. Work collaboratively with each core methods faculty to establish goals and timeline for working on each core methods course.
  - b. Identify options for strategic layering of content across courses- surveying materials across courses and building on concepts as students move across the methods curriculum.
  - c. Help develop and revise course content *in the semester before* a course is taught, including readings, exercises, and examples.
  - d. Assess the knowledge of incoming students, the influence of other equity-education initiatives prior to entering the methods curriculum, and gaps left to address.
2. Develop guiding principles to help faculty integrate equity content themselves, in both methods and substantive area courses.

In addition to working directly with faculty, this work was supported by Dr. Brian Pence (faculty liaison & primary contact), Dr. Julie Daniels (the Epidemiology Inclusion and Equity Committee liaison), and Dr. Allison Aiello (the Social Epidemiology Faculty liaison).

### 2021-2022 Equity-Methods Curriculum TA

Rae Anne M. Martinez, a current 6<sup>th</sup> year Epidemiology MSPH-PhD student. Martinez aims to integrate expertise in biological and social disciplines in order to understand how social determinants are embodied to impact health across the life course. She is also interested in exploring historical and contemporary conceptualizations of race and ethnicity, and studies how health researchers think, talk, and write about these social constructs. Her work has been supported by the Biosocial NIH T32 Training Program at the Carolina Population Center, which emphasizes interdisciplinary training and collaboration in order to foster unique, innovative approaches to public health.

In Fall 2019, Martinez was a TA for EPID 718 “Analytic Methods in Observational Epidemiology” under the direction of Drs. Brian Pence and Steve Marshall. During this time, she developed a unit on the conceptualization, operationalization, and use of race and ethnicity in epidemiology for the course. Concurrently, she served as TA for EPID 826 “Introduction to Social Epidemiology” under the direction of Dr. Julia Ward. Martinez is also one of the authors of the *Race and Ethnicity in Epidemiologic Methods Matrix* (see [Appendix B](#)).

Martinez was a Flinn Foundation Scholar at the University of Arizona, where she received her B.S. in Molecular and Cellular Biology and a B.A. in Sociology in 2014. Martinez received her MSPH from UNC Chapel Hill in 2019. Activities for this position concluded on April 30<sup>th</sup>, 2022.



## APPROACH<sup>‡‡</sup>

A facet of systemic social stratification<sup>§§</sup> is that it makes itself invisible. When the mechanisms or workings of various multilevel systems of social stratification become invisible to us, the consequences (i.e., inequities in health outcomes, early mortality, differences in wealth, power, prestige, or access to resources) appear to be natural – a normal part of life. With respect to race, systemic racism is particularly good at making itself invisible. This is, in part, because it has historically been supported by the “objective” sciences in addition to other social, legal, and political institutions.<sup>2-5</sup> If the workings of social stratification can remain invisible, they can persist.

“Combatting scientific racism... requires naming the methodological assumptions behind the treatment of race and/or ethnicity in medical research.”<sup>6</sup> Actually being able to name and engage with these implicit, base assumptions begins to illuminate the system. We cannot continue to reproduce practices of ritualistic regression<sup>7</sup> or route inclusion,<sup>8</sup> as they circumvent the need for critical consciousness and direct engagement. The departmental culture already heavily focuses on identifying and naming assumptions, whether they be related to causality (e.g., positivity, exchangeability, temporality, or treatment variation irrelevance) or threats to validity (e.g., missing data, confounding, selection bias, etc.), as well as clear communication of effect measures. So, at its core, what this approach calls for is simply in parallel with the standards of “good science” the Department already holds itself to.

“[We] are not calling for radical change or for every researcher to become a race scholar. Rather, [we] call for adherence to core scientific principles: to motivate the inclusion or exclusion of specific data or persons in a study, to define constructs (especially those for which there is debate or ambiguity), to select construct measures best fit for a specific research question, to strike a balance between theoretical knowledge and practical constraints when coding variables, to engage with analytic methods appropriate for the study question, to interpret findings with care, to address the limitations of data, measures, coding, and methods, and to clearly communicate and justify all of the above in publication.”<sup>9</sup>

The approach to this work was further influenced by the following personal principles:

**What are epidemiologic methods.** Conceptualization, contextualization, and operationalization are a part of methodology. Conceptualization is the process by which we define abstract concepts used in health scholarship. Contextualization is putting the abstract concept of interest in context of our study question and population. Finally, operationalization is the process by which we select and evaluate measures and coding schemes best fit for our study question and its context. While “traditional” methodology regularly engages with operationalization, bringing conceptualization and contextualization into the fold of what is considered “methodology” allows us to center theory, communities, and more rigorously evaluate our assumptions. Namely, we are able to answer “what is this construct? And why is it important to the study question and population?” We must directly answer these questions for more than just our exposure, outcome, and the occasional effect measure modifier. With respect to constructs that are considered to be normal, natural parts of our world (e.g., race, gender, ethnicity), we may find the process quite difficult and often unaddressed.

**Language as a source of power.** Language is a powerful tool that can clarify or obscure, justify or delegitimize. Often times we fail to critically examine the scientific communication practices which may reproduce and reify misconceptions about race, ethnicity, or other social-structural determinants of

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<sup>‡‡</sup> The following summarizes my [Rae Anne M. Martinez] approach to this work as the Equity Methods TA in 2021-2022 Academic Year.

<sup>§§</sup> Forces of social stratification includes: racism, ethnocentrism, sexism, ableism, classism, heteronormativity, colonialist or imperialist projects.

health.<sup>6,9,10</sup> As such, improvement of scientific communication with respect to race, ethnicity, and other social-structural determinants is a crucial step towards more equitable research practice and methodology. Moreover, focusing on scientific communication in the curriculum can be used to make our methodological assumptions explicit.

### Personal definitions.

- Diversity -- Bringing together a group of individuals who have different backgrounds, experiences, states of being, identities, or belongings.
- Inclusion -- Ensuring that all individuals are welcomed, respected, and able to fully participate in community, institutions, or other organizations without barrier. Individuals should be able to participate in discourse and leadership without fear of repercussion or reprisal.
- Equity -- Absence of health disparities related to social stratification or structures (i.e., a reduction in the “fundamental causes”)

### Influential readings to this work.

Rose G. Sick Individuals and Sick Populations. *International Journal of Epidemiology* 1985;14(1):32-38.

Wing S. Limits of Epidemiology. *Medicine & Global Survival* 1994;1(2):74-86.

Harding S. "Strong Objectivity": A Response to the New Objectivity Question. *Synthese* 1995;104(3):Feminism and Science (Sep., 1995):331-349. (<https://www.jstor.org/stable/20117437>).

Braveman, P., & Gruskin, S. (2003). Defining equity in health. *J Epidemiol Community Health*, 57, 254-258. doi:10.1136/jech.57.4.254

Zuberi T, Bonilla-Silva E. *White logic, white methods: racism and methodology*. Lanham: Rowman & Littlefield Publishers, 2008.

Ford CL, Airhihenbuwa CO. The public health critical race methodology: praxis for antiracism research. *Soc Sci Med* 2010;71(8):1390-8. DOI: 10.1016/j.socscimed.2010.07.030.

Tuck E, Yang KW. Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society* 2012;1(1):1-40.

Roth WD. The multiple dimensions of race. *Ethnic and Racial Studies* 2016;39(8):1398-1406. DOI: 10.1080/01419870.2016.1153693.

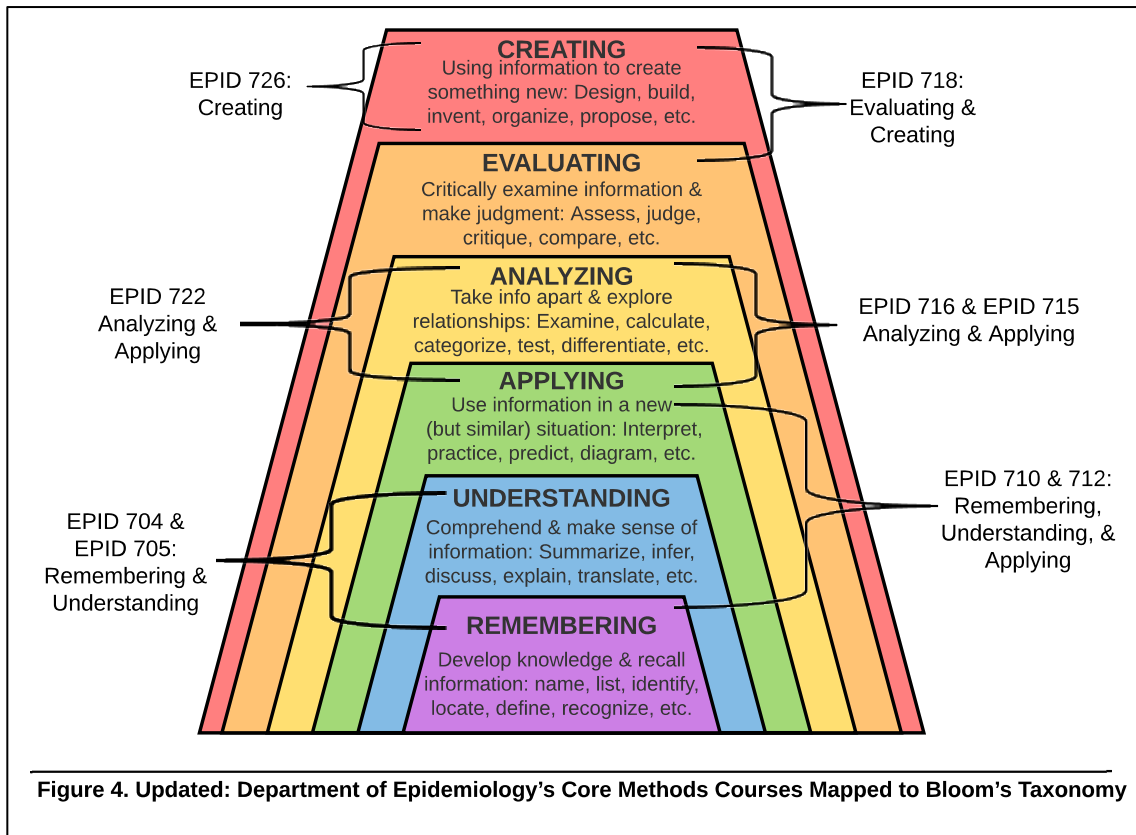
Đoàn LN, Bacong AM, Ma KPK, Morey BN. Epidemiologists Count: The Role of Diversity and Inclusion in the Field of Epidemiology. *Am J Epidemiol* 2020;189(10):1033-1036. DOI: 10.1093/aje/kwaa108.

Lett E, Adekunle D, McMurray P, et al. Health Equity Tourism: Ravaging the Justice Landscape. *J Med Syst* 2022;46(3):17. DOI: 10.1007/s10916-022-01803-5.

Martinez RAM, Andrabi N, Goodwin AN, Wilbur RE, Smith NR, Zivich PN. Conceptualization, operationalization, and utilization of race and ethnicity in major epidemiology journals 1995-2018: a systematic review. *Am J Epidemiol* 2020; kwac146, <https://doi.org/10.1093/aje/kwac146>

## CURRENT STATE

As aforementioned, the second-generation curriculum changes across core courses focused on very similar learning objectives, primarily in the levels of “Remembering” or “Understanding.” This was disjointed from the natural levels of the later methods courses (e.g., EPID 716, EPID 715, and EPID 718). Post this year’s work, the equity related content better matches level of each course.



[EPID 704: Socially Responsible Epidemiology](#), as new core course, serves as a level of “primer.” The course uses race and ethnicity to demonstrate the importance of conceptualization, contextualization, and operationalization in epidemiologic studies. The course covers tensions between “objectivity” and “subjectivity” in epidemiology, the historical context of race-racism in the United States, provides basic definitions, and other level setting content. Course assignments use reflective writing techniques, case studies, and close reading of articles to support the understanding or internalizing of these principles.

In EPID 710: Fundamentals of Epidemiology and EPID 712: Readings in Fundamentals of Epidemiology<sup>\*\*\*</sup>, students hear again about the conceptualization of race and racism in a US context using different examples and readings (mostly rooted in the Black-White racial binary), as well as the ideas of structural sexism and intersectionality. The course then bridges these topics into perspectives on social-structural determinants and causal inference (e.g., what does it mean for race or gender to be a “cause?”), while also discussing how to quantify health disparities and inequities. The EPID 710 lectures makes reference to several articles that are read in EPID 704 (Roth 2016; Jones 2001; Kaufman & Cooper 2001), providing additional insights to these works in new ways. The EPID 710 lecture also touches upon ethical principles and asking “good” questions, which is the focus of the first and last days of EPID 704. In the corresponding lab section to the EPID 710 unit (in EPID 712), students begin to apply this information, engaging with conceptualization (e.g., critiquing and rewriting

<sup>\*\*\*</sup> Reminder: Historically, EPID 712 “Readings in Fundamentals of Epidemiology” was encompassed in EPID 710 as the “lab” component of the course. These courses will be addressed together throughout the report as a pair.

definitions of race, racism, and ethnicity) and placing race and racism into DAGs. In smaller ways, race, ethnicity, and racism appear through the other readings of EPID 712 and examples of EPID 710.

EPID 715: Theory & Quantitative Methods in Epidemiology uses a diverse set of social-structural determinants in examples, including race, ethnicity, gender, class, and marriage as students analyze different special-case methods problems. Please note work for EPID 715 was on-going at the time of this report (April 2022).

In EPID 716: Epidemiologic Data Analysis, students apply prior principles in the completion of a highly structured analysis over the course of the semester which centers race and ethnicity as key variables. The course-long analysis examines effect of prenatal care on preterm birth using NC birth certificate data. Given the centrality of race and ethnicity to the assignment, the equity-related material or application is rather extensive. For the first lab assignment (Lab 1), student write a “methods section” of a manuscript for an epidemiologic journal. Students are required to provide a conceptualization (i.e., definition) for race and ethnicity, describe the operationalization of these constructs, and justify their relevance to the study question as part of the method section according ICMJE/JAMA guidelines.<sup>11,12</sup> Here students practice scientific communication while applying prior knowledge about conceptualization, operationalization, and context. The corresponding Lab 1 lectures discuss inclusive language principles, which students are first exposed to in the [“Gillings Inclusive Excellence Trainings.”](#) In the lectures corresponding to Lab 2, students receive another “layer of paint” with respect to race as a social construct, the difference between race and genetic ancestry, and the history of race in the US with additional examples beyond the Black-White racial binary. This additional “layer of paint,” however, is re-framed away from the perspective of “race as a special lecture topic” to a discussion of race and ethnicity as natural extension of the course project (i.e., the specific analysis of preterm birth and prenatal care). The reframing mirrors “best practice” in terms of identifying the theoretical motivation of study variables, rather than allowing ritualistic practice to drive decision making.

Students apply content from EPID 710 on placing race and racism in DAGs and the relationship to causal inference in Lab 4 of EPID 716. The role of race vs racism in construction of DAGs is discussed in both of the lectures corresponding to Lab 4, and student are held accountable to the material in an additional lab question.

Finally, in Lab 5, students examine effect measure modification by race and ethnicity. The corresponding lectures revisits operationalization – both how our choice of measurement and the lumping and splitting of groups can obfuscate disparities. Additional lecture content builds prior principles of clear scientific communication by examining how our use of language guides the interpretation of the disparity. More specifically, the lecture introduces how the use of language can pathologize groups or communities when we are unclear about the underlying mechanism or interpretation of an effect estimate.

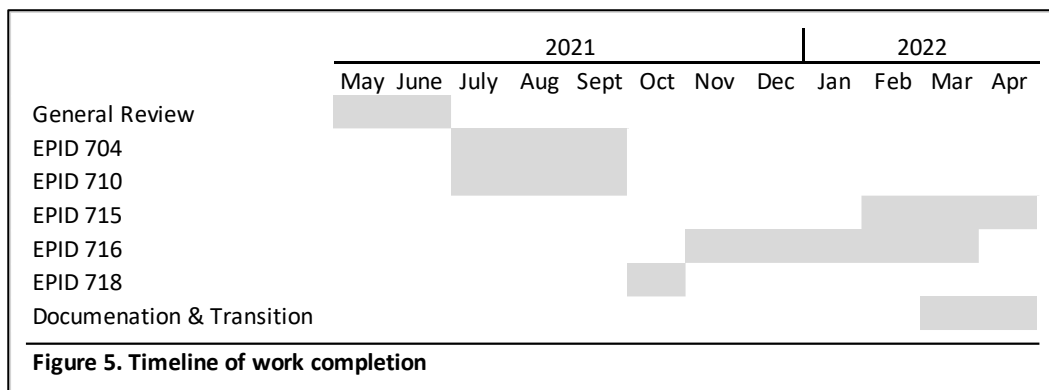
Lastly, in EPID 718: Analytic Methods in Observational Epidemiology, students have the opportunity to decide if and how to use social-structural determinants in their own study questions. Similar to EPID 716, students conduct a semester long analysis, which is structured through four major assignments. However, students are asked to generate a question of their own and identify a suitable data source. This results in a wide variety of study questions and data sources year-to-year in the course. In Assignment “Project part 1,” students write a specific aims page motivating their study, present a DAG of the causal relationships pertinent to the central hypothesis, provide a description of the data source, summarize measures of theoretically important variables, and engage with potential sources of bias. While in Assignment “Project Part 2,” students engage with (re)coding variables (e.g., assessing if variables need recoding and justifying those decisions with respect to study question and data source), examining variable distributions, sparse data, functional form, and EMM. Although not explicit, students are applying and synthesize equity-relate content from EPID 704 through EPID 716 in these two assignments.

EPID 718 also includes a 5-day unit explicitly related to race and ethnicity. The first two days apply another “layer of paint” to perspectives on EMM, casual inference, and interpretation from a health disparities perspective. The next two days use a scientific communication exercise to examine the gambit of decisions made by health researchers (e.g., motivations, conceptualization, operationalization, and interpretations) of race and ethnicity in different study questions with various study designs. This allows students reinterrogate many of the decisions they have just made in their own projects as well as the clarity of scientific writing. Students finish the unit with a day of small group discussion on how race-racism, ethnicity-ethnocentrism, or other social stratification process relate to their specific study question. This is followed up in Assignment “Project Part 3,” Question 2, which asks students to reflect explicitly on the role, measurement, and analytic decisions of a social power structure in their study.

## COURSE SPECIFIC CHANGES

For most courses, the first step was to conduct a review of materials and provide a brief report of recommendations and resources (e.g., theoretical or empirical articles, prerecorded talks, or podcasts). Ultimately, it was up to the teaching team or lead faculty instructor to decide what recommendations to incorporate. This section provides an overview of the changes that were made in this year for each of the methods courses. Additional documentation, such as the original reports of recommendations and resources, can be made available upon request.

This work was not done in the semester prior to the course, but rather concurrently. Timing was influenced by a number of factors, including the heavier lift of developing “EPID 704” (Figure 5.) and the bandwidth/availability of the teaching team and/or lead faculty instructor. Developing and revising course content in the semester prior is still likely optimal for future work and continued development.



Changes should be made and evaluated on a student cohort-by-cohort basis. Many changes can be made across core methods courses in a single academic year, but the best evaluation of the changes is how new materials interact or build upon each other as cohort of PhD students progresses through the curriculum.

### Semi-Structured Interviews with Prior Teaching Assistants (TAs)

Teaching Assistants play a crucial and unique role in the classroom. In addition to developing and delivering content, grading, and handling course logistics, TAs are often privy to student concerns, reactions, or interpretations of classroom materials. In order to better inform revisions and integration efforts, semi-structured interviews were conducted with 2020-2021 academic year TAs from EPID 710<sup>†††</sup>, EPID 715, EPID 716, and EPID 722. Structured questions focused on two themes: (A) the course materials themselves (e.g., lectures, readings, and assignments) and (B) support and preparedness of the TAs.

Specific findings and themes regarding the materials for each course are not summarized here; blinded notes from these interviews can be made available upon request. However, across courses, TAs expressed that they “felt nervous” prior to leading the race-racism specific labs, units, or discussions. Specifically, TAs were nervous of “tense moments,” “pointed or controversial questions,” and their ability to deescalate or mediate heated discussion. All TAs expressed that no such interactions took place in their lab sections or office hours and students were very respectful, as well as ready to learn on these topics.

TAs across courses who were not of the social epidemiology track were also worried about whether or not they had the “right information” – i.e., if they were providing students with accurate information on sensitive topics.

<sup>†††</sup> EPID 710 TAs were from the 2021-2022 academic year (i.e., Fall 2021).

## EPID 704: Socially Responsible Epidemiology

“EPID 704: Socially Responsible Epidemiology” was developed and piloted in Fall 2021 for proof of concept. The development of this course was suggested in *Race and Ethnicity in Epidemiologic Methods Matrix* (see [Appendix B](#)), as a way to concentrate level setting content and make space in later methods courses for more advanced topics. Thus, the overall objective of EPID 704 was to provide level-setting and foundational content on ethics, equity, and anti-racism, which would facilitate easier transition for later courses. The course was developed by Rae Anne Martinez and Dr. Chantel Martin. Dr. Ganga Bey and Kate LeMasters (current 4<sup>th</sup> year PhD candidate) assisted as guest lecturers.

The goals of this course were the following: 1) to understand the responsibilities epidemiologists have to study populations and scientific communities for public good, 2) to critically evaluate the use of social constructs within their own research and scientific discourse, 3) to identify potential harms to populations when social constructs are inappropriately defined, measured, and used in health research. For more details, please see the course syllabus ([Appendix C](#)).

This course was offered as a short term (5 class sessions), non-credit seminar and was strongly recommended for incoming PhD students (i.e., 2021 cohort). The course was also open to core methods TAs and students who entered the PhD or MSPH-PhD program prior to 2018. Overall, 24 students enrolled: 17 incoming students, two TAs, 5 students who entered prior to 2018. However, only 22 students participated in the course (2 students who entered prior to 2018 did not attend).

A post-course survey was designed to collect feedback on (1) the overall course, (2) course content and format, (3) course environment, (4) future offering of the course, and (5) major gaps/suggestions for improvement. Of the 22 students who participated, 14 (64%) completed the course evaluation. Post class survey results can be made available upon request; results from “overall course” questions are summarized below. Students also indicated that the course was too short (n=12, 86%) and that there wasn’t enough time for discussion and the activities.

**Table 1. EPID 704: Overall course feedback (n=14)**

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Overall, this course was excellent.	8 (57%)	5 (36%)	1 (7%)	0 (0%)	0 (0%)
The course met the objectives/competencies outlined in the syllabus.	8 (57%)	6 (43%)	0 (0%)	0 (0%)	0 (0%)
This course challenged me to think deeply about the subject matter.	8 (57%)	6 (43%)	0 (0%)	0 (0%)	0 (0%)
I believe I would be able to apply information/skills learned in this course.	8 (57%)	6 (43%)	0 (0%)	0 (0%)	0 (0%)
The course will be useful to my future work.	7 (50%)	7 (50%)	0 (0%)	0 (0%)	0 (0%)

This course has now been approved by the Department of Epidemiology Graduate Studies Committee (GSC) and the Graduate School at UNC Chapel Hill as a standing, required course for all incoming Epidemiology PhD students. EPID 704 will be offered in Fall 2022 as a 1-unit course by lead instructor Dr. Chantel Martin and co-instructor Dr. Ganga Bey. The first formal offering will be twice the length of the original pilot (10 class sessions vs. 5). Participation in EPID 704 counts toward newly required degree competencies in the doctoral program (see section “[PhD Competencies](#)”).

EPID 704 is not intended be exhaustive; students are encouraged to take other courses in the MPH Equity track (HBEH 700, HBEH 720, ENVR 784), History of Public Health (SPGH 690), Social Epidemiology (EPID 826 & 827), as well as EI or REI trainings to complement.

**Information on the other course specific changes (i.e., for EPID710, EPID 715, EPID716, EPID718, EPID 722) can be made available upon request.**

# PhD COMPETENCIES

In presenting the PhD competencies, the Department of Epidemiology Academic Policies states:

“The PhD program presupposes a foundation of knowledge of concepts and skills of epidemiology, an understanding of public health concepts and the population perspective, and the ability to read with sophistication reports of clinical and epidemiological studies. The PhD program assumes that graduates' professional identity and primary area of expertise will be in epidemiology, though the student may possess a prior area of professional expertise (such as medicine, nursing, or pharmacy).

The PhD program is designed to equip persons to function as independent researchers in academia, research institutes, government, or industry. While graduates often seek additional experience by way of postdoctoral training, a graduate of the PhD program is prepared to function as a faculty member of a graduate program in a university or in a position in a public health organization, government or industry, or multi-disciplinary setting of comparable independence and responsibility.

The competencies of the doctoral program in Epidemiology (listed below) guide our curriculum planning process and serve as a measure against which student achievement is assessed. The competencies should be read in relation to the School's mission. They fully meet the competencies set out for doctoral education at the UNC School of Public Health” (p.22).<sup>1</sup>

On November 10<sup>th</sup>, 2021, GSC approved updated competencies for Epidemiology PhD students to apply to incoming student cohorts beginning in 2022. The updated competencies now include health equity-focused elements (in bold below).

## Academic Policies – PhD Competencies

1. Identify, critically review, and synthesize the relevant body of scientific literature, identifying gaps and important questions, constructing specific research questions, and considering the perspectives of relevant community stakeholders.
2. Design epidemiologic studies - including appropriate study populations, **considering the relevance and importance of diversity in study populations**, strategies of data collection, data collection instruments, ethical data collection procedures - to identify or monitor public health problems, investigate etiologic and preventive relations, predict health outcomes, and provide epidemiologic input for program evaluation.
3. Develop detailed protocols for collecting epidemiologic data by means such as questionnaires, biomarkers, interviews, medical records, data systems and other data sources, with adequate consideration of **diverse group perspectives, historical experiences**, ethical and privacy considerations, data management principles, data security, quality control, and oversight.
4. Develop detailed data analysis plans and conduct data analyses for epidemiologic data such as data collected from individuals and data systems, including datasets made available by governmental and other organizations, to address research questions and estimate relevant population parameters. Use data analysis plans that take into account data quality, measurement error (**including measurement of social constructs such as race, ethnicity, and gender**), selection bias, confounding, and other potential for bias.
5. Work in interdisciplinary teams and contribute results from epidemiologic research to an integration with findings from other scientific literature (biological, psychological, sociological) and other substantive information (e.g., **community perspectives, concerns, and historical injustices**).



6. Understanding how epidemiological research relates to improving public health **and working to advance health equity**.
7. Develop skills in teaching epidemiology and in presenting oral and written reports and explanations to professional, student, and lay audiences; providing comments, questions, and suggestions to colleagues presenting epidemiologic research or methods in written and oral form; and responding professionally and effectively to comments and questions from editors, peer reviewers, and readers/students/listeners.

These changes help shift departmental culture by signaling that these topics are viewed by the department as an integral part of epidemiology training. Furthermore, the above changes increase accountability for both students and faculty. During the Intradepartmental Review (IDR), students must present an item-by-item summary of the degree to which each of the doctoral learning competencies has been met. If competencies have not been met, students and the IDR committee generate a training plan for completion (p.27).<sup>1</sup>

Students do not fulfil the competencies via the core methods curriculum alone; other learning opportunities to fulfil the competencies include substantive courses, journals clubs and seminars, research projects, and practicum experiences.

Changes made to the core methods curriculum this past year support the equity-focused elements of the recently revised PhD competencies.

	<b>Edited Competency</b>	<b>Course(s) with Lecture(s) and Assignments(s)</b>
2	Design epidemiologic studies ... <b>considering the relevance and importance of diversity in study populations, ...</b>	EPID 704 EPID 718 <ul style="list-style-type: none"> <li>• Depends on student’s specific research question for the primary, semester long analysis</li> </ul>
3	Develop detailed protocols for collecting epidemiologic data ..., with adequate consideration of <b>diverse group perspectives, historical experiences,...</b>	EPID 704 EPID 710 <ul style="list-style-type: none"> <li>• Lecture: Racism &amp; Disparities (L6 &amp; L7)</li> </ul> EPID 716 <ul style="list-style-type: none"> <li>• Lab Assignment 2, Lecture 1</li> </ul> EPID 718 <ul style="list-style-type: none"> <li>• Depends on student’s specific research question for the primary, semester long analysis</li> </ul>
4	Use data analysis plans that take into account data quality, including measurement error ( <b>including measurement of social constructs such as race, ethnicity, and gender</b> )...	EPID 704 <ul style="list-style-type: none"> <li>• Course day 3 “Operationalization:” Lecture &amp; Lab</li> </ul> EPID 716 <ul style="list-style-type: none"> <li>• Lab Assignment 5, Lecture 2</li> </ul> EPID 718 <ul style="list-style-type: none"> <li>• Assignments: Project Part 1, 2, &amp; 3</li> <li>• Scientific communication activity Day 1 &amp; 2</li> </ul>
5	...substantive information (e.g., <b>community perspectives, concerns, and historical injustices</b> )...	EPID 718 <ul style="list-style-type: none"> <li>• Depends on student’s specific research question for the primary, semester long analysis</li> </ul>

	Edited Competency	Course(s) with Lecture(s) and Assignments(s)
6	<p>Understanding how epidemiological research relates to improving public health <b>and working to advance health equity.</b></p>	<p>EPID 704            EPID 710           <ul style="list-style-type: none"> <li>• Lecture: Racism &amp; Disparities (L6 &amp; L7)</li> </ul>           EPID 716           <ul style="list-style-type: none"> <li>• Lab Assignment 5, Lecture 2</li> </ul>           EPID 718           <ul style="list-style-type: none"> <li>• Assignments: Project Part 3</li> <li>• Depends on student's specific research question for the primary, semester long analysis</li> </ul> </p>

## SUGGESTIONS FOR FUTURE CHANGES

Revisions of the curriculum, departmental policies, and institutional culture should be considered an on-going, iterative process. A clear “completion date” or point may not exist for this work. However, it is of the utmost importance for the Department to make a persistent commitment to improvement and to invest in the personnel and infrastructure to support these efforts. With better training and inclusive departmental culture comes better science. In turn, through better science, we may better serve our communities and promote health and wellbeing.

Although progress has been made during the 2021-2022 Academic Year, there remains room for improvement. Below are recommendations for further revisions to curriculum content, periodic assessment, and infrastructure.

### Curriculum Content

Across all courses. The equity-focused content in the core methods curriculum heavily focuses on the social-structural determinants of race-racism. We strongly suggest critical review of the implicit embedded assumptions surrounding other social-structural determinants of health within examples, assignments, and other learning materials of the methods core curriculum (e.g., sex vs gender, sexual orientation, class, etc.), as well as a parallel focus on the use and power of language. We also suggest creating continued accountability to equity-related materials via exam questions (e.g., methods comprehensive exam) or other assessments.

EPID 704: Socially Responsible Epidemiology. The EPID 704 post-course survey collected information on course content and format. Several additional content areas were identified by students, including:

- Integrate non-US perspectives on race-racism and ethnicity-ethnocentrism
- Expand discussion to other social-structural determinants beyond race-racism
- Strengthen the content on ethics

**Information on the other future recommendations (i.e., for EPID710, EPID 715, EPID 716, EPID 718, EPID 722, EPID 726) can be made available upon request.**

### Periodic Assessments of Success

Semi-structured Interviews. The semi-structured interviews with TAs provided key insights into the core methods courses. We recommend regularly conducting semi-structured interviews with TAs and 1<sup>st</sup> or 2<sup>nd</sup> year students to gain insights into what is and is not working with respect to the equity-related content or curriculum concerns more generally. We recommend that interviews be conducted by peers (i.e., other students) to prevent differentials in institutional power from creating potential reporting bias.

Survey of the incoming 2022 PhD Cohort. The incoming 2022 PhD Cohort will be the first cohort required to take EPID 704 and the “integrated” methods sequence. Creative thinking can be applied

to assess how integrated content has influenced student research, such as examining student publications, grants/awards, and dissertation topics over the coming years.

## Infrastructure & Support

Provide additional support for core methods TAs. During semi-structured interviews, TAs expressed interest in training or support for how to “de-escalate” or mediate difficult conversations, particularly around race and racism. As the curriculum continues to evolve with respect to equity-content, TAs also may be asked to preside over content, methods, or theories that they may not have been exposed to in their training. We suggest offering TAs additional trainings and resources, so that all feel fully supported and prepared to assume leadership roles on the classroom.

Continue to recognize and provide financial support for individuals who lead or assist this work. Much of the work to revise the curriculum to-date has been led by students. Unrecognized, unpaid, or *underpaid* labor<sup>11</sup> reinforces inequity. In order to ensure that the Department of Epidemiology is supporting equity on all fronts, continue to provide financial support for all – students, postdocs, staff, and faculty – who lead and assist in equity-related efforts, but particularly students.

## Alignment with Institutional Goals

Gillings School of Global Public Health: Inclusive Excellence Action Plan. In Fall 2019, the Gillings School of Global Public Health adopted an “Inclusive Excellence Action Plan,” developed to guide the school’s efforts to create a more diverse, inclusive, and equitable community of scholars. The action plan is a living document, most recently updated in July 2021. The plan includes six focus areas - training, curriculum, communications, advocacy, representation, and research – each with its own goals and metrics for assessment. You can find out more about the Inclusive Excellence Action Plan at: <https://sph.unc.edu/diversity/i-e-action-plan/>

The work accomplished through the Equity-Methods Curriculum TA further aligns the Department with the with the aims of the Inclusive Excellence Action Plan, specifically with respect to the “Curriculum” and “Research” focus areas. Please [Appendix D](#) for excerpts from the action plan.

As this work continues, we recommend the department periodically consult the Inclusive Excellence Action Plan and the Gillings School of Global Public Health’s Office of Inclusive Excellence. It is important that the Department commit to doing work inhouse and that efforts are synergistic with other intuitional projects. We also recommend that the Department of Epidemiology moves to align with other aims of the Action Plan, such as advocacy and representation.

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<sup>11</sup> The use of “underpaid” is in recognition that the stipend offered by the Department of Epidemiology is not commensurate with a living wage for the Chapel Hill-Durham metro area.

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Nothing is ever accomplished alone. The changes to the Department of Epidemiology's core methods curriculum and departmental culture are the result of truly collaborative efforts over several years. Everyone's action, both big (e.g., creation of new materials) and small (e.g., a simple conversation or interview), can cumulate in positive change. Faculty, postdocs, and especially current and past students have given time, energy, and insights to the Department, and have approached this work with generosity of spirit, humility, and willingness to learn.

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## APPENDICES

**Please note: the labeling of Appendices has changed with editing.** The “Gillings School of Global Public Health: Inclusive Excellence Action Plan” was originally Appendix D, while Appendix B was originally “Race and Ethnicity in Epidemiologic Methods Matrix,” and Appendix C was originally the “EPID 704 - Socially Responsible Epidemiology Syllabus (2021).”

### A. References

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## B. Gillings School of Global Public Health: Inclusive Excellence Action Plan

This section includes the first 9 pages of the Inclusive Excellence Action Plan. Find the full document: [https://sph.unc.edu/wp-content/uploads/sites/112/2021/10/Inclusive-Excellence-Action-Plan-2021\\_v4\\_with-Executive-Summary18.pdf](https://sph.unc.edu/wp-content/uploads/sites/112/2021/10/Inclusive-Excellence-Action-Plan-2021_v4_with-Executive-Summary18.pdf)

# INCLUSIVE EXCELLENCE ACTION PLAN

Gillings School of Global Public Health

July 2021




This Gillings School's Inclusive Excellence Action Plan is a living document and refreshed on an ongoing basis through collaboration between the Inclusive Excellence unit, the Inclusive Excellence Council (IEC), IEC subcommittee members, faculty, staff, and students. This work is conceptualized, executed, and evaluated through engagement with the broader Gillings School community. This work would not be possible without your insights, efforts, and commitment to fostering a more inclusive school. Thank you for all you do.

Inclusive Excellence  
Gillings School of Global Public Health  
University of North Carolina at Chapel Hill



## Executive Summary

The Inclusive Excellence Action Plan (IEAP) is a strategic plan, tied to the Gillings School's [mission and values](#), to create a more diverse, equitable and inclusive school. With roots dating back to 2010, the plan was re-envisioned in 2019 with input from Gillings faculty, staff, students, alumni, and various community partners and affiliates. The Inclusive Excellence Council (IEC), convened by the associate dean for inclusive excellence, guides implementation, evaluation, and refinements to the plan. The IEAP and work of the Council are organized around 6 focus areas:

Focus Area	Description	Overarching Goals
<b>Training</b> 	Develop, implement, and evaluate trainings, including strong antiracist and equity-driven components, for faculty, staff, TAs, and other members of the Gillings community.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Everyone in a position of power shares a common understanding of what constitutes an inclusive environment and acts on that understanding.</li> <li><input type="checkbox"/> All instructors are able to facilitate inclusive, respectful discussions about sensitive topics such as racism and other forms of oppression.</li> <li><input type="checkbox"/> All members of the Gillings community uphold values of inclusion and respect in interactions with each other.</li> </ul>
<b>Curriculum</b> 	Improve antiracist and equity components in student learning during orientation and across the curriculum.	<ul style="list-style-type: none"> <li><input type="checkbox"/> All students graduate with the ability to apply social justice in their public health work.</li> <li><input type="checkbox"/> Racism, social justice and health equity are integrated throughout and across curricula.</li> <li><input type="checkbox"/> Discussions are led by instructors capable of effectively facilitating dialogue on challenging topics of racism and oppression.</li> </ul>
<b>Communication</b> 	Develop and improve approaches to communicating about inclusion, equity, and antiracism efforts at Gillings.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Effectively communicate about plans, actions, statements, events and successes regarding inclusive excellence to all our constituents.</li> <li><input type="checkbox"/> Create a visual environment that communicates our commitments to equity, inclusion, antiracism, and social justice.</li> </ul>
<b>Advocacy</b> 	Advocate on behalf of students for living wages, fairness in hiring practices, and greater transparency regarding employment opportunities.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop mechanisms to ensure that financial resources are equitably allocated to students across the school.</li> <li><input type="checkbox"/> Collaborate with leaders across the University to provide students and employees with benefits that reflect the values of the Gillings School and public health.</li> <li><input type="checkbox"/> Provide transparent communication, about and access to, training and employment opportunities for students.</li> </ul>
<b>Representation</b> 	Improve efforts surrounding recruitment and retention of Gillings faculty, staff, and students from diverse backgrounds.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Cultivate a student, staff, and faculty composition that reflects the demographic composition of the communities we serve.</li> <li><input type="checkbox"/> Build pathways for meaningful representation and participation of members of historically marginalized groups in leadership positions throughout the school.</li> <li><input type="checkbox"/> Foster a school culture that is welcoming and nurturing for members of minoritized groups.</li> </ul>
<b>Research</b> 	Dismantle racism and promote equity throughout the research enterprise.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop a strong antiracist and health equity research portfolio within the Gillings School.</li> <li><input type="checkbox"/> Establish a culture where all Gillings researchers regularly apply an equity lens to their research projects, with additional support systems in place for those who are using health equity and antiracism-centered tools.</li> <li><input type="checkbox"/> Provide transparent communication about and access to training and employment opportunities for students.</li> </ul>

## Training

The goal of the TRAINING focus is to require inclusive excellence training, including a strong antiracist training component, for faculty, staff and TAs. Overarching goals are:

- Everyone in a position of power – e.g., those who make decisions about resource allocation – shares a common understanding of what an inclusive environment looks like (and does not look like) and acts on that understanding.
- All instructors are able to facilitate inclusive, respectful discussions about sensitive topics such as racism and other forms of oppression.
- All members of the Gillings community uphold values of inclusion and respect in interactions with each other.

Since the last iteration of the IEAP (2019), the Inclusive Excellence team has created a system to ensure that new and existing faculty and staff complete at least one antiracist training each year. The IE team identified trainings, assessed their education level, explored the feasibility of developing additional trainings designed by Gillings, and then designed and delivered key trainings. In Year 1, we tracked data via a survey. The IE team is now working with Gillings Human Resources (HR) and others to create an improved tracking system. The team continues to build an inclusive excellence training program for faculty and staff, track training completion and impact, and link training expectations to promotion, tenure, and annual review.

## Curriculum

The goal of the CURRICULUM focus is to require social justice and racial equity training at orientation, as part of the curriculum, and in the classroom. Overarching goals are:

- All students graduate with the ability to apply social justice in their public health work.
- Racism, social justice and health equity are more seamlessly integrated throughout and across curricula.
- Discussions are led by instructors capable of effectively facilitating dialogue on challenging topics of racism and oppression.

Following creation of the IEAP, the COMPASS module on social justice and equity was refined to be appropriate for BSPH, master's, and doctoral students and is a requirement for all incoming students prior to orientation. Since fall 2020, Gillings has also required all incoming students to complete a foundation inclusive excellence training, including a synchronous small group discussion, as part of orientation. The 12-credit MPH Core course sequence was comprehensively evaluated and updated in both 2020 and 2021 to strengthen equity, social justice and antiracist content and methods, as was the 3-credit Foundational Learning Objectives (FLO) course, required for all non-MPH students. Additionally, a 3-credit elective course on the critical history of public health was developed for debut during the fall of 2021. Other academic programs and concentrations have also created new, and updated current, courses. We are beginning to track these improvements.

## Communication

The goal of the COMMUNICATION focus is to significantly improve our approaches to communicating about our inclusion, equity and antiracism efforts. Overarching goals are:

- Effectively communicate about plans, actions, statements, events and successes regarding inclusive excellence to all our constituents.

- Create a visual environment that communicates our commitments to equity, inclusion, antiracism, and social justice.

Since the 2019 iteration, the Inclusive Excellence webpages have been revamped to increase usability and make resources such as the Action Plan more accessible. In addition, the IE team created an Inclusive Excellence lecture series and is working with the communications department to ensure that these lectures are effectively marketed and visible on the website. Future action items include adding a blog feature to the website and holding an open forum regarding Inclusive Excellence twice a year. The IE team held its first open forum in Fall 2021.

### Advocacy

The goal of the ADVOCACY focus is to advocate on behalf of students for living wages, fairness in hiring practices, and greater transparency regarding employment opportunities. Overarching goals are:

- Develop mechanisms to ensure that financial resources are equitably allocated to students across the school.
- Collaborate with leaders across the University, and the UNC-System and beyond as needed and appropriate, to provide student employee benefits that reflect the values of the Gillings School and public health.
- Provide transparent communication about, and access to, training and employment opportunities for students.

Since the 2019 iteration of the IEAP, the Student Funding and Awards Coordinator position was created (2019); an application portal was created where all Gillings student job opportunities could be posted; a student experience survey was released (2021), and informational sessions on funding graduate school were held during Open House and Admitted Students Day (2019 to present). Next steps are to create a Gillings Commitment guide; develop an easily accessible and visible infographic on the financial realities of graduate school; and develop a system to ensure that all student job opportunities offered by Gillings people are, indeed, posted to the Gillings Student Jobs Portal.

### Representation

The goal of the REPRESENTATION focus is to improve recruitment and retention of Gillings faculty, staff, and students from diverse backgrounds. Overarching goals are:

- Cultivate a student, staff, and faculty composition that reflects the demographic composition of the communities we serve.
- Build pathways for meaningful representation and participation of members of historically marginalized groups in leadership positions throughout the school.
- Foster a school culture that is welcoming and nurturing for members of minoritized groups as well as members of historically well-represented groups.

Since the 2019 iteration of the IEAP, the Inclusive Excellence Council was formed; the GRE requirement for all Gillings graduate programs was dropped; and Gillings School leaders now submit annual reports that specify recruitment and retention strategies and annual outcomes for the units they oversee. For the most updated Gillings student demographic data, see the [Gillings School Facts and Figures](#) webpage.

### Research

The goal of the RESEARCH focus, which was added in 2020, is to actively dismantle racism and promote equity throughout our research enterprise. Overarching goals are:

- Develop a strong antiracist and health equity research portfolio within the Gillings School
- Establish a culture where all Gillings researchers regularly apply an equity lens to their research projects, with additional support systems in place for those who are using health equity and antiracism-centered tools.
- Provide transparent communication about and access to training and employment opportunities for students.

This recently added focus area will be used to establish baseline goals for inclusive excellence in Gillings research. Identified action items include prioritizing awarding research that employs antiracist frameworks; developing strategies to help principal investigators integrate antiracism into their research; collaborating with Historically Black Colleges and Universities (HBCUs); providing research opportunities to students of color; and supporting global collaborations among researchers at Gillings and international scholars.

### Evaluation

A School-wide evaluation committee comprised of faculty, students, staff and other partners and guided by leaders from the Inclusive Excellence team are tasked with evaluating the IEAP. The Gillings evaluation plan contains eleven domains (students, curricula, research, practice, service, faculty, staff, operations, global health, innovation, inclusive excellence), each with co-leads and committee members. Within the inclusive excellence domain, each of the 6 focus areas contains measures that correspond with the overarching goals of the IEAP. Moreover, these measures integrate feedback received from faculty, staff, and student activist efforts in recent years. The evaluation committee uses data gathered, primarily, from surveys to monitor progress. Several Gillings units (i.e., Office of Student Affairs, Academic Affairs, Human Resources, Dean's Office, Strategic Analysis/Business Intelligence) collaborate to collect and evaluate the data.

Why was the inclusive excellence action plan (IEAP) created?

***Living into our commitments***

A key dimension of [our mission](#) at the Gillings School of Global Public Health is to eliminate health inequities across North Carolina and around the world. Our values, collectively reaffirmed in 2016 as part of our School's reaccreditation, include: a commitment to diversity and inclusion among our faculty, staff and students; a belief that public health is accountable and responsible to communities; and the recognition that we need to work collaboratively *with* communities to achieve equity. As such, a commitment to inclusion is imperative to us living into our values. To meet that commitment, as well as meet the increasingly diverse needs of North Carolina communities, we have, as a School, embraced the goal of ensuring that the climate within which we train public health professionals is an inclusive one – a learning environment that fosters participation of all its members and perpetuates sustained equity and inclusion.

In fostering a student-centered, inclusive school environment, we must look critically at the student, faculty and staff populations we recruit; to whom we direct resources; how we prioritize needs of diverse students, faculty and staff; and how we interact with each other in and out of the classroom. We aim to create an environment in which students from diverse backgrounds see themselves reflected in their instructors and mentors; and in which our curricula foster deep knowledge of, and a state-of-the-art toolkit for, understanding and dismantling systems of oppression that create inequity and poor health.

***Inclusive excellence as a means of achieving health equity***

Efforts to reconceptualize how health professional education might be delivered to reduce inequities in health outcomes have led to shifts in accreditation criteria of schools and programs of public health. In November 2016, the Council on Education for Public Health (CEPH), the U.S. Department of Education-authorized accrediting body for schools and programs of public health, released a new set of core competencies that identify structural racism, health disparities, and community engagement as central components of public health professional education. These guidelines require that students be able to discuss racism, structural bias, and health inequities at multiple levels of influence; describe the importance of cultural competence in public health; and apply an awareness of cultural values and practices to public health efforts.

As detailed in a dissertation by a recent Gillings graduate, adherence to these guidelines for all public health schools and programs requires *institutional commitments* to training faculty and instructor; an intensive, sustained effort to deliver inclusive curricula to students, more critical, reflexive, and inclusive climates throughout schools and programs of public health; and active recruitment and retention of faculty, staff, and school leaders who contribute to diversity in the broadest sense, including specializing in social justice issues related to health (Merino, 2018). The Gillings School Inclusive Excellence Action plan, adopted in Summer 2019, aims to enact such institutional commitments.

### ***Towards inclusive excellence at Gillings***

***Background.*** The Gillings School has a strong history of activism and research focused on reducing inequities and creating a more diverse and inclusive school. As recently as 2010, as part of the SPH2020 strategic planning process, over 60 faculty, students and staff from across the School came together to develop a plan for increasing diversity and inclusion at Gillings. Many of the [13 recommendations](#) from the 2010 task force were implemented over an 8-year period. Yet we had not moved the needle significantly in terms of increasing the diversity of our students, faculty and staff; and we had work to do to strengthen our teaching, curricula and overall climate. In Spring 2018, we leapt forward by hiring Kauline Cipriani, PhD, assistant (and then associate) dean for inclusive excellence. Under her guidance, and with the participation and leadership of ~100 Gillings faculty, students, staff and alumni, we initiated a renewal of our commitment to inclusive excellence. We have developed an ambitious but actionable plan, one we have been enacting in a systematic way.

***Developing the 2019 plan.*** The Inclusive Excellence Action Plan development process began with initial input from an open forum for the Gillings community (January 8, 2019). At that event, stakeholders identified ways to create a more diverse, inclusive and equitable School, leveraging the removal of a confederate statue on UNC's campus as a flash point to spur discussion. In real time, we voted on suggested strategies; later, we held brainstorming sessions with faculty/student/staff planning teams to help us ideate a fully developed set of action steps and ideas for evaluation. Draft plans were posted for a three-month open comment period and then discussed by groups across the school in student, faculty and staff open sessions. Draft plans were revised at each juncture to reflect community input. The plan was then approved by the Gillings School Dean's Council. Evolution of the plan continued after this approval. For example, we incorporated additional input from faculty, staff and students via feedback sessions and a survey and, in 2020, added an additional priority area: Research.

As we moved through the process, it became evident what was taking shape was a full, multi-year strategic inclusive excellence plan. Based on input from various stakeholders, we adjusted our pace to include time for thoughtful feedback from our community and, in Fall 2019, coordinated the launch of the new Inclusive Excellence Council, the group charged with guiding implementation for, and monitoring progress of, the plan. This Council is composed of faculty, staff and students from all departments and Gillings School units. We see the Inclusive Excellence Action Plan as a living document, to be revisited and updated regularly, in partnership with all stakeholders, towards a more inclusive Gillings.

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## 2021-22 Gillings Inclusive Excellence Action Plan Priorities

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### Training

- Communicate more effectively about training opportunities and requirements for faculty, staff, and students.
  - Clarify what it means to be an expert in equity and IE training; adjust team of experts and approval criteria for training sources accordingly.
  - Redefine metrics for success in training; explain qualification criteria for different levels of training.
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### Curriculum

- Evaluate and improve the curriculum and training provided to students in the Health Equity, Social Justice, and Human Rights Concentration.
  - Support faculty in the evaluation and improvement of public health research and practice methods and how they are taught.
  - Develop summary of Gillings courses with equity focus; share widely.
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### Communication

- Arts Committee continues to guide decision-making re: refreshing photos, art and displays across the Gillings School and the School website.
  - Adopt strategic IE guide for print, web and social media.
  - Improve management processes for use of IE best practices in sharing IE content in newsletters, webpages, etc.
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### Advocacy

- Collect information about hiring/funding processes across units; create/disseminate a best practices list while also identifying and halting problematic practices.
  - Communicate information on hiring/funding for all students on the Gillings application portal.
  - Improve application portal processes to increase ease of use for faculty and staff who post positions there.
  - Improve transparency about processes surrounding the use of the [Student Feedback and Equity Concerns Form](#).
  - Track/report data regarding demographics of students hired.
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### Representation

- Work with the IE team and Gillings departments to understand and communicate what IE efforts are underway across the school.
  - Share successes/best practices across units.
  - Ensure that faculty, staff, and students from all units are represented on IEC.
  - Report Gillings demographics regularly/across multiple groups, along with innovations and CQI efforts that helped lead to improvements.
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### Research

- Identify what the health equity and antiracism-focused research portfolio looks like at Gillings, including a focus on diversifying our team of faculty, staff, and student researchers.
  - Build schoolwide research partnerships with local HBCUs and MSIs.
  - Clarify expectations for mentorship among research advisors/advisees.
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