

**William & Mary**  
**Department of Health Sciences**  
**KINE 369: Methods in Health Development**  
**Spring 2022**

**Part I: Course Information**

<b>Instructor</b>	<b>Julius Nyerere Odhiambo, PhD</b>
<b>Contact Information</b>	Global Research Institute Email: <a href="mailto:jnodhiambo@wm.edu">jnodhiambo@wm.edu</a> Telephone: (757)7983599 Office: 2 <sup>nd</sup> Floor, Global Research Institute
<b>Office hours</b>	Monday – Friday  Although I plan my schedule to be available on Tuesdays and Thursdays, I will not appear outside or on zoom if there are no appointments scheduled. I am here to help you succeed and look forward to seeing you this semester! Please do reach out via my email.
<b>Credit Hours</b>	<b>3.0</b>  This course follows the Federal Government's Credit Hour definition: "An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalence that reasonably approximates no less than: <ol style="list-style-type: none"> <li>1. One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately 15 weeks for one semester or trimesters hour of credit, or 10 to 12 weeks of a one-quarter hour of credit, or the equivalent amount of work over a different amount of time; or</li> <li>2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours."</li> </ol>
<b>Class Location/Time</b>	Location: John E Boswell Hall 3 Tuesday/Thursday: 12:30 pm – 1:50pm
<b>Course Context</b>	This course follows a flipped learning approach. Flipping a course refers to moving content delivery to an asynchronous format for students to consume independently. In-class time is dedicated to learning activities such as application, extension, review, and collaboration. In essence, this kind of rotation provides flexibility in allocating time and the locations in which learning activities take place. In class and out of class requirements are as follows:  <ul style="list-style-type: none"> <li>• In-class requirements: A weekly, 80 minute, in-class meeting in John E Boswell Hall 3. These face-to-face meetings will be on Thursdays from 12:30 pm -1:50pm.</li> <li>• Out-of-class requirements: Outside of class, students are required to read assigned readings, watch videos, submit reflection exercises and online homework assignments as outlined in the syllabus.</li> </ul> <p>The total time required per week is a minimum of 9 hours.</p>
<b>Mode of Study</b>	Announcements, readings, and supplementary materials will be available on Blackboard. Check-in regularly to keep up to date on the latest course

		information. <b>Assignments should be submitted directly to Blackboard. Please do not email assignments directly to me.</b> If you do, they will not make it to Blackboard and will not be graded. Student grades will be posted in the grade center on Blackboard.
<b>Important Dates</b>	<b>W&amp;M</b>	The course begins: 1/27 Add/drop deadline: 2/4 Spring break: 3/12-3/20 Withdraw deadline: 28/3 Mid-term grade evaluation: 3/7 – 3/27 Last day of classes: 5/6 Reading period: 5/7 – 5/8 Exams: 5/9 – 5/13 Reading period: 5/14 – 5/15 Exams: 5/16 – 5/17 Commencement: 5/20 – 5/22

## **Part 2: Course Overview**

By the end of the module, students will be able to:

1. Understand the meaning and importance of health research methods in the context of evidence-based medicine.
2. Apply ethical principles in public health research.
3. Develop a critical understanding of the strengths and limitations of quantitative and qualitative research methods and techniques.
4. Analyze quantitative and qualitative data using computer-based programming and software, as appropriate.
5. Understand how to develop research questions that can be answered with quantitative data.
6. Develop written and oral presentations based on qualitative and quantitative analyses.

### **Required Course Text**

Eyler, Amy A. *Research Methods for Public Health*. Springer Publishing Company, 2020.

### **Recommended Course Text\***

1. Bowling A (2009) *Research Methods in Health: Investigating Health and Health Services*, Open University Press, Milton Keynes
2. Remler, Dahlia K., and Gregg G. Van Ryzin. *Research methods in practice: Strategies for description and causation*. Sage Publications, 2021.

### **Course Software**

The course will use:

- a. NVivo for qualitative analysis.  
Link: <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/about/nvivo/who-its-for/academia>
- b. R and R Studio  
Additional information on how to download R and R Studio: <https://www.rstudio.com/>

## **Blackboard**

Announcements, readings, lectures, and supplementary materials will be available on Blackboard. Check in regularly to keep up to date on latest course information. Assignments should be submitted directly to Blackboard. Please do not email assignments directly to me. If you do, they will not make it to Blackboard and therefore will not be graded. Student grades will be posted in the grade center on Blackboard.

## **Course Requirements and Evaluation**

- a. Reflective assignments – 40%
- b. Practical sessions and assignments – 30%
- c. Mid-term and Final Exam – 30%

All assignments are due at the beginning of the next class. Late assignments will not be accepted. A standard grading scale will be employed to determine the final course grade:

A	100-92
A-	91-90
B+	89-87
B	86-82
B-	81-80
C+	79-77
C	76-72
C-	71-70
D	69-60
F	59 & below

## **Class attendance and participation**

Consistent with W&M's belief that learning is most effective when the instructor and students convene, our course this semester is scheduled for in-person instruction. That said, we are still dealing with a pandemic, even as it ebbs toward an endemic. In this setting, we need to have a way to communicate when students or the instructor cannot be in person. As soon as you know that you will not be able to attend class in person (either because of having tested positive, having symptoms consistent with COVID, or other health matters), please email me. Since this is an incredibly challenging time with the potential for quite complicated comings and goings, we need to operate on the basis of a **trustful relationship**; please try your very best not to miss classes for non-health related reasons.

You are expected to attend class meetings regularly, have read assigned required articles prior to class, and actively participate in classroom discussion as well as exercises. To attain an 'A'

in this course you must attend consistently and be a contributor to the discussions and exercises.

## **Honor Code**

**Don't cheat!** The College of William & Mary has had an honor code since at least 1779. Academic integrity is at the heart of the university, and we all are responsible for upholding the ideals of honor and integrity. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and I will report all suspected instances of academic dishonesty to the honor system. The Student Handbook ([www.wm.edu/studenthandbook](http://www.wm.edu/studenthandbook)) includes your responsibilities as a student and the full Code. Your full participation and observance of the Honor Code is expected. To read the Honor Code, see [www.wm.edu/honor](http://www.wm.edu/honor)

## **Covid-19**

This semester, the world will enter its third year with COVID. As we experience a fifth surge of pandemic with the highly transmissible omicron variant, it is reasonable to expect significant levels of infection at W&M. As an academic community based on faculty and students convening, spring 2022 courses will largely consist of in-person instruction. All of us will follow W&M requirements - vaccinations and boosters, indoor masking, as well as quarantine and isolation when ill. That last is really important: for those who have tested positive, W&M's requirements must be fulfilled before class can be attended in person, and, out of an abundance of caution, anyone with symptoms consistent with COVID- even if they don't have a positive test- should not come to class.

Please note that testing positive for COVID or any other temporary illness is not considered a disability as defined by ADA guidelines and is not under the purview of W&M's Student Accessibility Services (SAS). Thus, any questions should be addressed via email.

## **Mental and Physical Well-Being**

William & Mary recognizes that students juggle different responsibilities and can face challenges that make learning difficult. There are many resources available at W&M to help students navigate emotional/psychological, physical/medical, material/accessibility concerns. Asking for help is a sign of courage and strength. If you or someone you know is experiencing any of these challenges, we encourage you to reach out to the following offices:

- For psychological/emotional stress, please consider reaching out to the W&M Counseling Center <https://www.wm.edu/offices/wellness/counselingcenter/>; or (757) 221-3620, 240 Gooch Dr., 2nd floor. **Services are free and confidential.**
- For physical/medical concerns, please consider reaching out to the W&M Health Center at <https://www.wm.edu/offices/wellness/healthcenter/>; or (757) 221-4386, 240 Gooch Drive.

- For additional support or resources, please contact the Dean of students by submitting a Care Report at:  
<https://www.wm.edu/offices/deanofstudents/services/caresupportservices/index.php>;  
or by calling 757-221-2510, or by emailing [deanofstudents@wm.edu](mailto:deanofstudents@wm.edu)
- For a list of many other resources available to students, see [Health and Wellness Resources for Students](#)

As your professor, I also ask you to reach out to me if you are facing challenges inside or outside the classroom; I will guide you to appropriate resources on campus.

### **University Events**

Recognized student organizations provide an opportunity for students to become engaged citizens. As part of my commitment to being an engaged faculty member I like to support these organizations by attending sporting events, choral, stage or dance performances, art exhibits, debates, sketch comedy performances, carnivals, and the list continues. If there is an opportunity for me to attend one of your events please let me know through email or after class. When possible, I make every effort to attend and see how you are helping create an engaging learning environment for all of us.

### **ADA accommodations at W&M**

It is the policy of William and Mary to accommodate students with disabilities and qualifying diagnosed conditions in accordance with federal and state laws. Any student who feels s/he may need accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2509 or [sas@wm.edu](mailto:sas@wm.edu) to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please visit <http://www.wm.edu/sas>

### **Diversity Plan**

The Department of Kinesiology & Health Sciences is committed to supporting a diverse and inclusive environment.

To advance that commitment in concrete ways, the Department adopted a 2019-2020 diversity and inclusion plan <https://www.wm.edu/as/kinesiology/diversity-plan/index.php>.

## COURSE SCHEDULE

Date mm/dd	Assignment
<b>Module I: Introduction to Public Health</b>	
<p><b>Week 1:</b> 1/27, Thursday</p>	<p><b>In-class meeting:</b> Introduction to Public Health Research</p> <p><b>Read</b> Turnock, B.J. Essentials of Public Health. 3rd ed. 2016, Jones &amp; Bartlett Learning. (Chapter 1)</p> <ol style="list-style-type: none"> <li>1. Vandenbroucke, Jan P., HM Eelkman Rooda, and Harm Beukers. "Who made John Snow a hero?." <i>American Journal of Epidemiology</i> 133.10 (1991): 967-973.</li> <li>2. Murray, C., Phil, D., &amp; Lopez, A. (2013). Measuring the Global Burden of Disease. <i>The New England Journal of Medicine</i>, 369, 448-57.</li> <li>3. Kawachi, I., N. Daniels, and D.E. Robinson. Health Disparities by Race and Class: Matters. <i>Health Affairs</i> 2005, 24(2): 343-352</li> </ol> <p><b>Watch:</b></p> <ol style="list-style-type: none"> <li>1. What is Public Health (<a href="https://www.youtube.com/watch?v=t_eWESXTnic">https://www.youtube.com/watch?v=t_eWESXTnic</a>)</li> <li>2. Time to Rethink Public Health (<a href="https://www.youtube.com/watch?v=LXNHEj2mUql">https://www.youtube.com/watch?v=LXNHEj2mUql</a>)</li> </ol> <p><b>Skim:</b> Citrin, Toby. "Topics for our times: public health--community or commodity? Reflections on healthy communities." <i>American Journal of Public Health</i> 88.3 (1998): 351-352.</p> <p><b>Submit: Assignment #1</b> Write a simple literature review that identify a research gap that can be filled by a new study.</p>
<p><b>Week 2:</b> 2/1, Tuesday</p>	<p><b>In-class meeting</b> Historical perspectives of Public Health</p> <p><b>Read:</b> Defining Public Health: Historical and Contemporary Developments (Chapter 1)</p> <p><b>Read:</b> <a href="https://www.nationalgeographic.com/science/article/the-plague">https://www.nationalgeographic.com/science/article/the-plague</a></p> <p><b>Skim</b></p> <ol style="list-style-type: none"> <li>1. Ramsay, Michael AE. "John Snow, MD: anaesthetist to the Queen of England and pioneer epidemiologist." <i>Baylor university medical center proceedings</i>. Vol. 19. No. 1. Taylor &amp; Francis, 2006.</li> <li>2. Cameron, Donald, and Ian G. Jones. "John Snow, the Broad Street pump and modern epidemiology." <i>International Journal of Epidemiology</i> 12.4 (1983): 393-396.</li> <li>3. Szreter, Simon. "The population health approach in historical perspective." <i>American journal of public health</i> 93.3 (2003): 421-431.</li> <li>4. Novick, Lloyd F., and Cynthia B. Morrow. "Defining public health: Historical and contemporary developments." <i>Public Health Administration: Principles for Population-Based Management, 2nd edition</i>. Sudbury: Jones and Bartlett Publisher (2008).</li> </ol> <p><b>Watch:</b> John Snow video (<a href="https://www.youtube.com/watch?v=INjrAXGRda4">https://www.youtube.com/watch?v=INjrAXGRda4</a>)</p> <p><b>Submit:</b> Reflection #1: Public health in the 21<sup>st</sup> Century: Achievement and Challenges</p>

2/3, Thursday	<p><b>In-class meeting</b> Core functions of Public Health (A Case study of Virginia Department of Health - <a href="https://www.vdh.virginia.gov/">https://www.vdh.virginia.gov/</a>)</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Ford, Eric W., W. J. Duncan, and P. M. Ginter. "Health departments' implementation of public health's core functions: an assessment of health impacts." <i>Public Health</i> 119.1 (2005): 11-21.</li> <li>2. Hyde, Justeen K., and Stephen M. Shortell. "The structure and organization of local and state public health agencies in the US: a systematic review." <i>American journal of preventive medicine</i> 42.5 (2012): S29-S41.</li> </ol> <p><b>Submit:</b> Reflection #2: Core functions of public health in the age of Covid-19.</p>
<p><b>Week 3:</b> 2/8, Tuesday</p> <p>2/10, Thursday</p>	<p><b>Public Health Research Ethics</b> <b>In-class meeting:</b> Introduction to ethics in Public Health Research</p> <p><b>Read:</b></p> <p><b>Watch:</b> Experimenter (<a href="https://www.youtube.com/watch?v=o8XriePFEug">https://www.youtube.com/watch?v=o8XriePFEug</a>) <b>Watch:</b> Public Health Ethics vs Biomedical Ethics (<a href="https://www.youtube.com/watch?v=aTH_meAn84">https://www.youtube.com/watch?v=aTH_meAn84</a>)</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Coughlin, Steven S. "Ethical issues in epidemiologic research and public health practice." <i>Emerging themes in epidemiology</i> 3, no. 1 (2006): 1-10.</li> <li>2. Tulchinsky, Theodore H. "Ethical issues in public health." <i>Case Studies in Public Health</i> (2018): 277.</li> <li>3. Rogers, Wendy Anne. "Ethical issues in public health: a qualitative study of public health practice in Scotland." <i>Journal of Epidemiology &amp; Community Health</i> 58, no. 6 (2004): 446-450.</li> </ol> <p><b>In-class meeting</b> Ascribing responsibility; Who is the public in public health? Critical lessons from the case studies.</p> <p><b>Submit:</b> Reflection #3: Addressing ethical challenges in a global pandemic</p>
<b>Module 2: Qualitative Research Methods</b>	
<p><b>Week 4:</b> 2/15, Tuesday</p> <p>2/17, Thursday</p>	<p><b>In-class meeting:</b> Nature and purpose of qualitative research in public health</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. An overview of qualitative research methodology for public health researchers. <i>International Journal of Medicine and Public Health</i>. 2014;4(4).</li> <li>2. Johnson, Jessica L., Donna Adkins, and Sheila Chauvin. "A review of the quality indicators of rigor in qualitative research." <i>American Journal of Pharmaceutical Education</i> 84.1 (2020).</li> </ol> <p><b>In-class meeting:</b> Sampling in qualitative research</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Marshall, Martin N. "Sampling for qualitative research." <i>Family practice</i> 13, no. 6 (1996): 522-526.</li> </ol>
<b>Week 5:</b> 2/22, Tuesday	<b>In-class meeting:</b> Data collection methods – Focus Group Discussion

<p>2/24, Thursday</p>	<p><b>Skim:</b></p> <ol style="list-style-type: none"> <li>1. Kitzinger, Jenny. "Qualitative research: introducing focus groups." <i>Bmj</i> 311, no. 7000 (1995): 299-302.</li> <li>2. Ellis, B. Heidi, Scott H. Decker, Saida M. Abdi, Alisa B. Miller, Colleen Barrett, and Alisa K. Lincoln. "A qualitative examination of how Somali young adults think about and understand violence in their communities." <i>Journal of interpersonal violence</i> 37, no. 1-2 (2022): NP803-NP829.</li> <li>3. Benaraba, Charlyn Mae D., Nathalie Joyce B. Bulaon, Sheila Mae D. Escosio, Amiel Harold G. Narvaez, Anton Niño A. Suinan, and Margie N. Roma. "A comparative analysis on the career perceptions of tourism management students before and during the COVID-19 pandemic." <i>Journal of Hospitality, Leisure, Sport &amp; Tourism Education</i> 30 (2022): 100361.</li> </ol> <p><b>Watch:</b> Conducting a focused group discussion (<a href="https://www.youtube.com/watch?v=Auf9pkuCc8k">https://www.youtube.com/watch?v=Auf9pkuCc8k</a>)</p> <p><b>Submit:</b> Reflection #4: Best practices for notetakers in a FGDs</p> <p><b>In-class meeting:</b> Data collection methods - Interviews</p> <p><b>Skim:</b></p> <ol style="list-style-type: none"> <li>1. Wood, Caroline I., Nancy Daley-Moore, and Rachel Powell. "Using interviewing in public health research: Experiences of novice researchers." <i>The Qualitative Report</i> 24, no. 10 (2019): 2441-2452.</li> <li>2. The CDC Field Epidemiology Manual. <a href="https://www.cdc.gov/eis/field-epi-manual/chapters/Qualitative-Data.html">https://www.cdc.gov/eis/field-epi-manual/chapters/Qualitative-Data.html</a></li> </ol> <p><b>In groups:</b> Focus group discussion guide to enable the state of health review its Covid-19 policy.</p>
<p><b>Week 6:</b> 3/1, Tuesday</p> <p>3/3, Thursday</p>	<p><b>In-class meeting:</b> Analyzing, presenting, and interpreting qualitative data</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Burnard, Philip, Paul Gill, Kate Stewart, Elizabeth Treasure, and Barbara Chadwick. "Analyzing and presenting qualitative data." <i>British dental journal</i> 204, no. 8 (2008): 429-432.</li> </ol> <p><b>Download and Install:</b> NVivo (<a href="https://software.wm.edu/">https://software.wm.edu/</a>)</p> <p><b>Practical Session #1:</b> Introduction to Nvivo</p> <p><b>Skim:</b></p> <ol style="list-style-type: none"> <li>1. Gilbert, Linda S., Kristi Jackson, and Silvana di Gregorio. "Tools for analyzing qualitative data: The history and relevance of qualitative data analysis software." In <i>Handbook of research on educational communications and technology</i>, pp. 221-236. Springer, New York, NY, 2014.</li> <li>2. Davidson, Judith, Trena Paulus, and Kristi Jackson. "Speculating on the future of digital tools for qualitative research." <i>Qualitative Inquiry</i> 22, no. 7 (2016): 606-610.</li> </ol> <p><b>Submit:</b> Reflection #5: Outline the pros and cons of using computer assisted qualitative analysis software - CAQDAS</p>



## Module 3: Quantitative Research methods

**Week 7:**  
3/8, Tuesday

**In class meeting:** The Role of quantitative methods in public health.

**Read:**

1. Bruce, Nigel, Daniel Pope, and Debbi Stanistreet. Quantitative methods for health research: a practical interactive guide to epidemiology and statistics. John Wiley & Sons, 2018.

**Skim:**

2. Simpson, Grahame K., and Bruce Lord. "Enhancing the reporting of quantitative research methods in Australian social work." Australian Social Work 68, no. 3 (2015): 375-383.

**Watch:**

3/10, Thursday

**In-class meeting:** Formulating scientific questions quantitatively (Illustrative examples – Frameworks for research questions)

**Skim:**

1. Peat, Jennifer K., Craig Mellis, Katrina Williams, and Wei Xuan. Health science research: A handbook of quantitative methods. Routledge, 2020.

**Submit:** Reflection #6:

- a. Describe how research questions for exploratory, descriptive, and explanatory quantitative questions differ and how to phrase them.
- b. Outline the differences between and provide examples of strong and weak explanatory research questions

3/12 - 3/20

**SPRING BREAK: No classes**

**Week 8:**

3/22, Tuesday

**Introduction to descriptive statistics, data tables and graphs**

**In class meeting:** Analysis of different types of data such as categorical outcome, continuous outcome, and binary outcome.

**Download:** Download and install R (<https://www.r-project.org/>) and R-Studio (<https://www.rstudio.com/>)

3/24, Thursday

**Practical session #2:** Data visualization in R

**Skim:**

1. <https://rkabacoff.github.io/datavis/>

**Week 9:**

3/29, Tuesday

**Inferential data analysis**

**In class meeting:** Hypothesis testing and confidence intervals

**Read:**

1. Hymans, Saul H. "The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives." (2009): 499-503.

3/31, Thursday	<p><b>In-class meeting:</b> Introduction to regression analysis</p> <p><b>Skim:</b></p> <ol style="list-style-type: none"> <li>1. Bender, Ralf. "Introduction to the use of regression models in epidemiology." In Cancer Epidemiology, pp. 179-195. Humana Press, 2009.</li> <li>2. Perez-Riverol, Yasset, Laurent Gatto, Rui Wang, Timo Sachsenberg, Julian Uszkoreit, Felipe da Veiga Leprevost, Christian Fufezan et al. "Ten simple rules for taking advantage of Git and GitHub." PLoS computational biology 12, no. 7 (2016): e1004947.</li> </ol> <p><b>Submit:</b> Reflection #7: Understanding limitations and best practices for using p-values and confidence intervals</p>
<p><b>Week 10:</b> 4/5, Tuesday</p> <p>4/7, Thursday</p>	<p><b>Thinking Spatially</b></p> <p><b>In-class meeting:</b> Spatializing public health</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Yang, Tse-Chuan, Carla Shoff, and Aggie J. Noah. "Spatializing health research: what we know and where we are heading." Geospatial health 7, no. 2 (2013): 161.</li> <li>2. Li, Meifang, Xun Shi, and Xia Li. "Integration of spatialization and individualization: the future of epidemic modelling for communicable diseases." Annals of GIS 26, no. 3 (2020): 219-226.</li> </ol> <p><b>Practical session #3:</b> Introduction to GIS</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Nyapwere, Newton, Yolisa Dube, and Prestige Tatenda Makanga. "Geographically Precise Public Health: Case of Southern Mozambique." In Practicing Health Geography, pp. 45-55. Springer, Cham, 2021.</li> <li>2. Weeramanthri, Tarun Stephen, and Peter Woodgate. "Spatially enabling the health sector." Frontiers in public health 4 (2016): 243.</li> </ol>
	<p><b>Mid-term Exam #1: Research proposal</b></p> <ol style="list-style-type: none"> <li>1. Devise and refine a research question and develop a research statement.</li> <li>2. Determine appropriate methods based on your research question.</li> <li>3. Explore the ethical issues to be involved in your research</li> </ol>
<b>Module 4: Writing a Journal Article</b>	
<p><b>Week 11:</b> 4/12, Tuesday</p> <p>4/14, Thursday</p>	<p><b>In-class meeting:</b> Preparation of a research protocol</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Bigby, Christine. "Preparing manuscripts that report qualitative research: Avoiding common pitfalls and illegitimate questions." Australian Social Work 68, no. 3 (2015): 384-391.</li> </ol> <p><b>Useful link:</b> <a href="https://www.springer.com/gp/authors-editors/authorandreviewertutorials">https://www.springer.com/gp/authors-editors/authorandreviewertutorials</a></p> <p><b>In-class meeting:</b> Structuring a research paper</p> <p><b>Discussion:</b> Editing – Bring the entire article to class.</p>

	<p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Gewin, Virginia. "How to write a first-class paper." <i>Nature</i> 555, no. 7694 (2018).</li> <li>2. 11 steps to structuring a science paper editors will take seriously</li> </ol>
<p><b>Week 12:</b></p> <p>4/19, Tuesday</p> <p>4/21, Thursday</p>	<p><b>In class meeting:</b> Publishing a journal article (Dissemination and target audience)</p> <p><b>Watch:</b> How to publish medical journal articles (<a href="https://www.youtube.com/watch?v=bjPaRzBz0qY">https://www.youtube.com/watch?v=bjPaRzBz0qY</a>)</p> <p><b>Practical exercise #4:</b> Pitching your research</p> <p><b>Skim:</b></p> <ol style="list-style-type: none"> <li>1. Faff, Robert, Tim Kastle, Micheal Axelsen, Mark Brosnan, Rebecca Michalak, and Kathy Walsh. "Pitching research for engagement and impact: a simple tool and illustrative examples." <i>Accounting &amp; Finance</i> 61, no. 2 (2021): 3329-3383.</li> </ol>
<p><b>Week 13:</b></p> <p>4/26, Tuesday</p> <p>4/28, Thursday</p>	<p><b>In-class meeting:</b> Reproducible research principles</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Madeyski, Lech, and B. A. Kitchenham. "Reproducible research—what, why and how." <i>Wroclaw University of Technology, PRE W</i> 8 (2015).</li> <li>2. Orozco, Valérie, Christophe Bontemps, Elise Maigné, Virginie Piguet, Annie Hofstetter, Anne Lacroix, Fabrice Levert, and Jean-Marc Rousselle. "How to make a pie: reproducible research for empirical economics and econometrics." <i>Journal of Economic Surveys</i> 34, no. 5 (2020): 1134-1169.</li> </ol> <p><b>In-class meeting:</b> Documentation, reporting and version control</p> <p><b>Skim:</b></p> <ol style="list-style-type: none"> <li>1. Lowndes, Julia S. Stewart, Benjamin D. Best, Courtney Scarborough, Jamie C. Afflerbach, Melanie R. Frazier, Casey C. O'Hara, Ning Jiang, and Benjamin S. Halpern. "Our path to better science in less time using open data science tools." <i>Nature ecology &amp; evolution</i> 1, no. 6 (2017): 1-7.</li> <li>2. Blischak, John D., Emily R. Davenport, and Greg Wilson. "A quick introduction to version control with Git and GitHub." <i>PLoS computational biology</i> 12, no. 1 (2016): e1004668.</li> </ol> <p>Submit: Create a Git OR GitHub profile</p>
<b>Module 7: The Future of Public Health</b>	
<p><b>Week 14:</b></p> <p>5/3, Tuesday</p>	<p><b>In-class meeting:</b> Emergency Preparedness, Post Covid-19</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Graham, Hilary. "Where is the future in public health?." <i>The Milbank Quarterly</i> 88.2 (2010): 149-168.</li> <li>2. Barrett, Bruce, Joel W. Charles, and Jonathan L. Temte. "Climate change, human health, and epidemiological transition." <i>Preventive medicine</i> 70</li> </ol>

<p>5/5, Thursday</p>	<p>(2015): 69-75.</p> <p><b>Read:</b> Cardona, Beatriz. "The pitfalls of personalization rhetoric in time of health crisis: COVID-19 pandemic and cracks on neoliberal ideologies." <i>Health Promotion International</i> 36.3 (2021): 714-721.</p> <p><b>In-class meeting:</b> Decolonizing global public health</p> <p><b>Read:</b></p> <ol style="list-style-type: none"> <li>1. Hayward, Ashley, Larissa Wodtke, Aimée Craft, Tabitha Robin, Janet Smylie, Stephanie McConkey, Alexandra Nychuk, Chyloe Healy, Leona Star, and Jaime Cidro. "Addressing the need for indigenous and decolonized quantitative research methods in Canada." <i>SSM-Population Health</i> 15 (2021): 100899.</li> <li>2. Institute of Medicine. Board on Health Promotion, et al. <i>The future of the public's health in the 21st century</i>. National Academy Press, 2003.</li> </ol> <p><b>Submit:</b> Reflection #8:</p> <ol style="list-style-type: none"> <li>1. Evaluate the role and challenge of globalization in health research</li> <li>2. Examine future of public health amidst social and racial injustice</li> </ol>
<p><b>Week 15:</b> Before 5/10</p>	<p><b>Final Exams:</b> This will be the FINAL exam for this module.</p>