GEOG/ENVI-258 - Fall 2024 - FYC Geography of Environmental Hazards

MWF 10:50-11:50 am, Carnegie 05

Instructor Information

Instructor Email Office Hours and Location

Eric D. Carter <u>ecarter@macalester.edu</u> TBA, Carnegie 103

Preceptor/TA Email Office Hours and Location

Aidan Reynolds <u>areynol1@macalester.edu</u> TBA

Course Description

The study of environmental hazards stands at a key point of intersection between the natural and social sciences. Geography, with its focus on human-environment interactions, provides key analytical tools for understanding the complex causes and uneven impacts of hazards around the world. We will explore the geophysical nature and social dimensions of disasters caused by floods, droughts, earthquakes, volcanoes, tsunamis, tornadoes, hurricanes, and wildfires. For each of these hazard types, we apply theoretical concepts from major hazards research paradigms, including quantifying the human and economic impacts of disaster; assessing, managing, and mitigating risk; and reducing the impacts of disaster, not only through engineering works but also by reducing social vulnerability and enhancing adaptive capacity. Looking into the future, we will discuss how global-scale processes, such as climate change and globalization, might affect the frequency, intensity, and geographical distribution of environmental hazards in the decades to come. Since this is a WA (writing for argument) course, we will also emphasize developing your skills in written and oral communication, scholarly research, and information literacy. *This course fulfills the following general education requirements: WA (writing for argument). It also counts for a social science course in distribution requirements, for the Geography and Environmental Studies majors, and the CGH (Community and Global Health) concentration.*

Course Materials

Gaul, G. M. (2019). *The Geography of Risk: Epic Storms, Rising Seas, and the Cost of America's Coasts.* Sarah Crichton Books. ISBN: 9781250758224.

Graff and Birkenstein (2024). *They Say/I Say: The Moves That Matter in Academic Writing*. Norton, 6th ed. ISBN: 9781324070030

All other readings for this course will be available electronically on **Moodle**.

Course Schedule (detailed)

How to read *They Say, I Say*: keep up with the chapters of *TSIS* as assigned in the syllabus, but also feel free to read ahead. Note that mostly I've assigned chapters in order, but some are out of order, due to the relevance of specific topics. We will discuss *TSIS* in class, especially in our scholarly skills workshops.

Week 1

Sept. 4 (Wed.) Introduction and Course Business / Meaning of a Liberal Arts Education

Cronon, W. (1998). 'Only Connect...' The Goals of a Liberal Education. *The American Scholar* 67 (4). Ungar, S. (2010, Feb. 28). 7 Major Misperceptions About the Liberal Arts. *Chronicle of Higher Education*.

Sept. 6 (Fri.) Paradigms of Hazards Research

Smith, K. (2013). Hazard in the Environment (ch. 1) in *Environmental Hazards* (6th ed.). Cutter, S. L. (2018). Compound, cascading, or complex disasters: what's in a name? *Environment, 60*(6), 16-25. *They Say, I Say,* Preface, Introduction, and ch. 13

Week 2

Sept. 9 (Mon.) Quantifying Disaster Impacts

Smith, K. (2013). Dimensions of Disaster (ch. 2) in *Environmental Hazards* (6th ed.). Lowrey, A. (2017, Dec. 20). The Most Expensive Weather Year Ever. *The Atlantic* online.

Sept. 11 (Wed.) Risk Assessment 1

Smith, K. (2013). Risk assessment and management (ch. 4) in *Environmental Hazards* (6th ed.). Mueller, B. (2022, April 18). Is Covid More Dangerous Than Driving? *New York Times.*

Sept. 13 (Fri.) Risk Assessment 2

Krewski, D., et al. (2022). Principles of risk decision-making. *Journal of Toxicology and Environmental Health B*, 1-29.

Julavits, H. (2019, Dec. 31). What I Learned in Avalanche School. *New York Times They Say, I Say,* ch. 1-3

Week 3

Sept. 16 (Mon.) Discussion/Scholarly Skills Workshop

Focus on citing and using sources; avoiding plagiarism; uses and misuses of Al. *They Say, I Say*, ch. 4-5

Sept. 17 (Tues.)

Assignment 1 DUE. Argument about disaster trends backed with quantitative data and analysis. (350-500 words)

Sept. 18 (Wed.) Vulnerability (and related concepts)

UNDRR (n.d.). Vulnerability: What makes people vulnerable? *PreventionWeb.net* Klinenberg, E. (2002). *Heat wave: a social autopsy of disaster in Chicago*. Chicago: University of Chicago Press. (excerpt)

Sept. 20 (Fri.) Tectonic Hazards: Earthquakes

Schulz, K. (2015). The really big one. *The New Yorker* Watch Video: "NOVA: Deadliest Earthquakes" (2012)

Week 4

Sept. 23 (Mon.) Earthquakes: Haiti Case Study

Reading Packet on 2010 Haiti Earthquake

Sept. 24 (Tues.)

Assignment 2 DUE. Making a decision, using an analytical framework and backed with quantitative data. Use a risk analysis to decide whether to hold an outdoor concert given certain probabilities of extreme weather events. (350-500 words)

Sept. 25 (Wed.) Discussion/Scholarly Skills Workshop

They Say, I Say, ch. 6-8, 14, 18 Other readings TBA

Sept. 27 (Fri.) Volcanoes

Readings TBA

Week 5

Sept. 30 (Mon.) Tropical Storms

Readings TBA

Oct. 1 (Tues.)

Assignment 3 DUE. Apply a hazards paradigm to explain the causes of a disaster, the 2010 Haiti earthquake (750-1000 words)

Oct. 2 (Wed.) Global Climate Change, Variability, and Extreme Events

Guest Lecture by Kenny Blumenfeld, Ph.D., State Climatology Office, Minnesota DNR

Irfan, U. (2021). Climate change worsens extreme weather. A revolution in attribution science proved it. *Vox.com*

Hayhoe, K. and F. Otto (2021). What Cutting-Edge Science Can Tell Us About Extreme Weather. *NY Times*, August 17.

Oct. 4 (Fri.) Geography department alumni talk

Featuring Joe Harrington '24 and Corgan Archuleta '24. Meet together with GEOG-261. *They Say, I Say,* ch. 9-11

Week 6

Oct. 7 (Mon.) The "Nature" of Flooding

McPhee, J. (1987, February 23). Atchafalaya. The New Yorker.

Madrigal, A. (2011). What We've Done to the Mississippi River: An Explainer. *The Atlantic* online.

Oct. 9 (Wed.) U.S. Flood Policy and Management

Reading Packet on U.S. Flood Policy

They Say, I Say, ch. 12

Discuss mid-semester portfolio revising process

Oct. 11 (Fri.) GIS lab activity on flood risk and social vulnerability

Tate, E., Rahman, M. A., Emrich, C. T., & Sampson, C. C. (2021). Flood exposure and social vulnerability in the United States. *Natural Hazards*, *106*(1), 435-457.

Oct. 12 (Sat.) Field Trip on Local Environmental Hazards

Week 7

Oct. 14 (Mon.) Careers in Geography and Hazards Research

Guest Lecture by Jacob Ramthun '17, NASA SERVIR

Oct. 15 (Tues.)

Mid-Semester Portfolio DUE.

Oct. 16 (Wed.) Activities TBA

Oct. 18 (Fri.) NO CLASS – FALL BREAK

Week 8

Oct. 21 (Mon.) Geography of Risk: Climate Change Impacts on America's Coasts

Begin Gaul, Geography of Risk

Discussion in class

Oct. 22 (Tues.)

Brief topic statement for assignment 7 (literature review) DUE.

Oct. 23 (Wed.) Geography of Risk: Climate Change Impacts on America's Coasts

Continue Gaul, Geography of Risk

Discussion in class

Oct. 25 (Fri.) Geography of Risk: Climate Change Impacts on America's Coasts

Finish Gaul, Geography of Risk

Palm and Bolsen (2022, March 25). Coastal home buyers are ignoring rising flood risks, despite clear warnings and rising insurance premiums. The Conversation.com.

Wilkinson, F. (2022, August 8). We Will All End Up Paying for Someone Else's Beach House. New York Times. Discussion in class

Week 9

Oct. 28 (Mon.) Library Day

Visit to the library, focusing on research skills for final project assignment They Say, I Say, ch. 15

Oct. 29 (Tues.)

Assignment 4 DUE (book review of "Geography of Risk")

Oct. 30 (Wed.) Climate Change, Coastal Flooding, and Managed Retreat

Mach, K.J. and Siders, A. R. (2021, July 16). Is Your Town Threatened by Floods or Fires? Consider a 'Managed Retreat.' New York Times.

Siders, A. R., Hino, M., & Mach, K. J. (2019). The case for strategic and managed climate retreat. Science, 365(6455), 761-763.

Nov. 1 (Fri.) Social Infrastructure and Resilience to Climate Change

Klinenberg, E. (2016, Oct. 25). Want to Survive Climate Change? You'll Need a Good Community. Wired.com.

Williams-Eynon, A. *Social Spaces, Resilient Communities: Social Infrastructure as a Climate Strategy for Real Estate*. Washington, DC: Urban Land Institute, 2023.

Week 10

Nov. 4 (Mon.) Scholarly Skills Workshop

Focus on op-ed writing Other readings TBA

Nov. 5 (Tues.) Election Day

Nov. 6 (Wed.) US Flood Policy Stakeholder Debate Activity

Prepare for in-class debate on U.S. flood policy (stakeholder-oriented debate)

Nov. 8 (Fri.) US Flood Policy Stakeholder Debate Activity

In-class debate on U.S. flood policy (stakeholder-oriented debate)

Week 11

Nov. 11 (Mon.) Discussion/Scholarly Skills Workshop

Registration begins --- discuss spring registration procedures

Nov. 12 (Tues.)

Assignment 5 DUE (op-ed on US flood policy due)

Nov. 13 (Wed.) Drought in the Western US

Readings on Western drought TBA

Nov. 15 (Fri.) Drought, Famine, and Hunger

Sen, A. (1999). Famine and Other Crises, from *Development as Freedom*.

De Waal, A. (2018). The end of famine? Prospects for the elimination of mass starvation by political action. *Political Geography*, *62*, 184-195.

Week 12

Nov. 18 (Mon.) Wildfires and Climate Change

Running, S. W. (2006). Is Global Warming Causing More, Larger Wildfires? *Science*, *313*(5789), 927-928. Gabbert, B. (2018, Nov. 25). Climate assessment predicts increasing wildfires. *Wildfire Today*.

Nov. 19 (Tues.)

Working bibliography for assignment 7 (literature review) DUE.

Nov. 20 (Wed.) California wildfires case study

Pierre-Louis, K. and Schwartz, J. (2021, July 16). Why Does California Have So Many Wildfires? *New York Times*. Other readings TBA

Nov. 22 (Fri.) Tornadoes

Hausfather, Z. (2022). Tornadoes and climate change: what does the science say? Carbon Brief.

Week 13

Nov. 25 (Mon.) Scholarly Skills Workshop

Activities TBA

Nov. 26 (Tues.)

Assignment 6 DUE. Evaluate the evidence for causes of a trend: Is climate change leading to more frequent wildfires? (350-500 words)

Nov. 27 (Wed.) and Nov. 29 (Fri.) NO CLASS-THANKSGIVING BREAK

Week 14

Dec. 2 (Mon.) Scholarly Skills Workshop Advice on oral presentations

Dec. 4 (Wed.) Student Oral Presentations

Dec. 5 (Thurs.)

Assignment 7 (literature review) DUE

Dec. 6 (Fri.) Student Oral Presentations

Week 15

Dec. 9 (Mon.) Student Oral Presentations

Dec. 11 (Wed.) Student Oral Presentations - LAST DAY OF CLASSES

Finals Week

Dec. 18 (Wed.)

FINAL PORTFOLIO DUE

Note: there is no final exam for this class; our last meeting as a class is Dec. 11

Assignments and Grading

There are only a few components to your grade: (a) attendance and participation – see details under "Course Policies" below; (b) a writing portfolio; and (c) an oral presentation on your research project.

Most of your grade in this course will come from a writing portfolio you will work on throughout the semester. There are several reasons for using the portfolio format. First, writing-intensive FYCs require at least 20-25 pages of work in revision. Second, the portfolio format is meant to encourage you to make writing and revision a habit, something you do almost continuously throughout the semester, since the best way to improve your writing is through constant practice. Third, the portfolio format means that most of your grade comes from your best work at the end of the term, which incorporates all the lessons you've learned throughout the semester. These essays will be generally short (around 350-800 words, depending on the assignment).

First drafts of essays will be due at specific times, and you will be graded on these drafts. However, the *total* of all first drafts will be worth just one-quarter of your course grade, while the *final* portfolio will be worth half of your course grade. There will also be a partial version of the portfolio due at mid-semester, so you can receive additional feedback. Throughout the semester, you will receive intensive writing instruction and feedback from Prof. Carter and your TA.

Here is the grading breakdown:

Attendance and Participation	20%
Writing Portfolio – all first drafts	25%
Final Portfolio	50%
Oral Presentation	5%
TOTAL	100%

Any written assignments or other activities that don't go specifically into the writing portfolio will be counted as part of your attendance and participation grade.

For grading, I will also be using a "contract for a B" format, which guarantees you a minimum final grade of B if you fulfill certain basic requirements (see more details just below).

Note that there are no exams or quizzes in this course.

Contract for a Final Grade of "B"

Conventional grading often leads students to think more about grades than about writing; to worry more about pleasing me than about figuring out what you really want to say or how you want to say it; to be reluctant to take risks with your writing; sometimes even to feel you are working against me or having to hide part of yourselves from me.

At the same time, it is crucial to have opportunities for revision, to show how you are improving and learning new things as the semester goes on. That is why I favor the "final portfolio" format for writing – you will have a chance to revise your work many times, if you wish, and present revised versions of all your work together in one package, the final portfolio. In this course, the portfolio is worth 50 percent of your overall grade. I will give you plenty of qualitative feedback on your writing (including letter grades on your first drafts, based on clear grading criteria).

Understandably, having so much of your grade determined by a final portfolio can cause some anxiety, especially if you're not accustomed to non-traditional grading strategies.

For these reasons, I am using a kind of contract for grading.

You are guaranteed a final grade of at least a B if you meet the following conditions:

- Attendance. Don't miss more than one week's worth of classes. (If you miss class, you still need to do the assignment.)
- Punctuality. Don't be habitually late. (If you are late or miss a class, you are still responsible to find out what assignments were made.)
- Late assignments. All your assignments must be turned in on time. I will give you one "token" that offers you a 48-hour extension on an assignment. This token cannot be used on the final portfolio, which is due unconditionally on Wednesday, December 18.

- Participating, sharing and responding. Work cooperatively in groups. Be willing to share some of your writing, to listen supportively to the writing of others and, when called for, give full and thoughtful responses.
- Completeness. The essays you turn in must be complete, meeting the minimum word count and looking like an actual essay. You can't just write a few bullet points and turn that in, even as a first draft.
- Meeting in office hours. Before the end of week 13, you must meet at least once with Prof. Carter **and** at least once with your TA to discuss writing for this class. You are welcome to attend office hours more frequently.

I will let you know if you have broken the contract. At that point, a minimum grade of B is no longer guaranteed, but you could still earn a B or better by doing good-to-excellent work.

As you see, the grade of B depends on behaviors. Grades of A, A- or B+, however, depend on quality. Thus, you earn a B if you put in good time and effort; I will push you all to get a B. But to get a higher grade, you have to make your time and effort pay off into writing of genuine excellence, while also meeting the conditions for a B.

To be clear, I will be giving you letter grades on assignments as the semester goes along, and I will use the weighting scheme outlined in the syllabus to determine your final grades. If you have complied with all the conditions of the contract above, a "B" is the *lowest* final course grade you could achieve. But you could well earn a much higher grade, depending on performance.

[Language for this policy borrowed with permission from Peter Elbow (U. Mass) and Dan Trudeau (Macalester)]

Other Course Policies

Attendance and Participation

In this class, 20 percent of your grade derives from attendance and participation.

Attendance plays an essential role in learning, so you are warmly invited and expected to attend all class meetings. Attendance will be important not only for your learning, but also for our ability to build a community together and maintain a sense of connection and commitment to one another. Your presence in class matters. If you will not be in class for any reason, it is your responsibility to inform me in advance, or as early as possible, via email. It is also your responsibility to make up work you missed in your absence. Participation is distinct from attendance and is also an essential part of this course. In-class discussions, on-line discussion forums, responses to brief ungraded writing assignments, quizzes, etc. will be factored into your participation grade. In general, "participation" means speaking up, sharing your thoughts, and making yourself noticed in positive, productive, and supportive ways. It also means listening carefully and respectfully to your fellow students. It is important to remember that we all have different styles of expression. If you have not been able to participate in a class discussion for any reason but want to demonstrate your active engagement, please send me an email after class with a comment or an idea you had that you would have liked to share, but were not able to during class. Students with any concerns, questions, or need for consideration for flexibility should connect with me as soon as possible to determine an appropriate plan.

Come Prepared!

Being part of this class means being prepared to participate fully in each day's activities. Those activities are spelled out clearly in the course outline and I'll be giving you frequent reminders about what we'll be doing in class on a given day. Please make sure to do the readings or consult other resources before class. The quality of in-class discussion and group work depends on your doing the assigned readings in advance. Do not be surprised if I call on you, unannounced, for your thoughts about an assigned reading. Only occasionally will class periods be taken up by lecture, and even then, you'll have a much better understanding of the material if you put in the work ahead of time.

Academic Integrity

As in every course, you will be expected to follow the college's policies on academic honesty: specifically, "Students are expected to maintain the highest standards of honesty in their college work. Forgery, cheating and plagiarism are serious offenses and students found guilty of any form of academic dishonesty are subject to disciplinary action." For more details, see the college's guidelines on Academic Integrity (link here).

Use of Artificial Intelligence (AI)

In this course, you may use AI tools (such as ChatGPT) to help you generate ideas and to brainstorm. You may not submit any work generated by an AI program as your own—that would be no different than submitting the work of another human writer as your own (a type of plagiarism). If you include material—including both ideas and language—generated by an AI program, it should be cited like any other references.

Special Accommodations

If you have a physical or learning disability that will require special accommodations, please contact me to discuss arrangements. All conversations will be confidential. You will also need to meet with a representative from Disability Services, which determines accommodations. They can be contacted here: disabilityservices@macalester.edu .

Communication

You are welcome to come see me during my scheduled office hours. If you can't meet during those times, please send me an email or call my office and we'll schedule an appointment. In general, I answer emails within 24 hours. But I always prefer to discuss important matters in person, not electronically or by phone. Also, make sure that you check your email frequently, because I do send email messages – either from my own email address or via Moodle – frequently to the class.

Use of Electronic Devices in Class

Laptops are permitted in class but only for note-taking and for activities in class when specifically indicated. When we are having a lecture, discussion, student project presentation, or similar activity, I expect everyone's eyes and attention to be focused on that activity. You definitely should not be browsing the web, checking email, doing your homework, and so on during these class activities. The use of cell phones is strictly prohibited: no calling, texting or other uses of your cell phone during class time. I am only asking for three hours of your time each week to focus deeply on the course subject matter, so please consider the classroom to be a screen-free zone, unless we're using devices specifically for class activities.

Recording Policy

The Macalester College Classroom Recording (MCCR) policy sets forth community expectations regarding the recording (whether audio, video, or streaming) of class lectures, discussions, office hours, and other course-related activity. As an academic community, we value the free exchange of ideas and the privacy of community members. We are also committed to providing appropriate accommodations to students who require recorded lectures as an academic adjustment for documented disabilities. The MCCR policy balances the legitimate uses of classroom recording, the intellectual property of the faculty, and the privacy of individual students and faculty. The entire policy can be found here. In short, the policy requires students to submit a completed Student Recording Agreement to the appropriate office (Disability Services for students with approved accommodations; Academic Programs and Advising for all others) prior to engaging in any type of recording. The faculty member who signed the Recording Agreement (or is notified by Disability Services that recording will occur as an accommodation) is responsible for notifying the class that recording will be occurring. The required Student Agreement Recording form is available here.

Religious Observance

Students may need to take part in religious observances that occur during the semester. If you have a religious observance/practice that conflicts with your participation in the course, please contact me before the end of the second week of the semester to discuss appropriate accommodations.

Health and Wellness

You are encouraged to make your health and well-being a priority throughout this semester and during your career at Macalester. Taking care of yourself will help you engage more fully in your academic experience. Remember that beyond being a student, you are a human being carrying your own experiences, thoughts, emotions, and identities with you. It is important to acknowledge any stressors you may be facing, which can be mental, emotional, physical, cultural, financial, etc., and how they can have an impact on your academic experience. I encourage you to remember that you have a body with needs. In the classroom, eat when you are hungry, drink water, use the restroom, and step out if you are upset and need some air. Please do what is necessary so long as it does not impede your or others' ability to be mentally and emotionally present in the course. Outside of the classroom, sleeping, moving your body, and connecting with others can be strategies to help you be resilient at Macalester. If you are having difficulties maintaining your well-being, please don't hesitate to contact me and/or find support from Health & Wellness Center. I have included contact information for health and wellness resources on the course Moodle page.

Inclusivity

I am committed to providing a safe and equitable learning environment that welcomes and supports everybody. As learners and teachers, we all bring various experiences and life contexts to this course. These differences will emerge in class and be part of what we negotiate and benefit from as a developing community. I acknowledge that academic institutions have evolved within a historical context that privileges certain students over others, and in this classroom, we will do our best to be aware of how these inequities may manifest. I hope you will feel comfortable coming to us to express any concerns or suggestions; this is an iterative process that requires the collaboration of all.

Late work

You must turn in your work on time. I will indicate due dates for every assignment, and you must respect them. Every student has one "free token" to use for turning in an assignment up to 48 hours late, for the whole semester. Otherwise, I will have to penalize you 10 percent of your grade (or a full letter grade) for a given assignment for every day that it is late. A token cannot be used for the final portfolio, which is due on December 18, no exceptions. For other, extenuating circumstances (e.g. illness, accident, bereavement, religious observance, etc.), I will consider granting extensions on a case-by-case basis.

Turning in Assignments

I will be using electronic submission for most assignments. For a given assignment, I will create a "dropbox" on Moodle that has a specific time that work is due (and the dropbox then "closes"). Please do not submit assignments via email or as "shared" documents in Google Docs.

Course Schedule At-a-Glance

	Monday	Tuesday	Wednesday	Thursday	Friday
1	2 (SEPT) LABOR DAY	3	4 Introduction Course Business Meaning of a Liberal Arts Education	5	6 Hazards Paradigms
2	9 Quantifying Impacts of Disaster	10	11 Risk Assessment 1	12	13 Risk Assessment 2
3	16 Scholarly skills workshop	17 Assignment 1 (Disaster Trends) Due	18 Vulnerability and related concepts	19	20 Earthquakes
4	23 Earthquakes (Haiti case study)	24 Assignment 2 (Risk Analysis) Due	25 Discussion/Scholarly Skills Workshop (writing paper #3)	26	Volcanoes
5	30 Tropical Storms	1 (OCT) Assignment 3 (Hazards Paradigms) Due	2 GCC, Variability, and Extreme Events (Kenny Blumenfeld guest)	3	4 Geography alumni talk
6	7 Flooding	8	9 US flood policy	10	11 GIS lab activity FIELD TRIP SAT→
7	14 Careers in geography and hazards research (Jake Ramthun, guest)	15 Mid-Semester Portfolio due	16 TBA	17 FALL BREAK	18 FALL BREAK

8	21 Begin "The Geography of Risk"	22 Brief Topic Statement for assignment 7 due	23 Continue "The Geography of Risk"	24	25 Finish "The Geography of Risk"
9	28 Library Day	29 Assignment 4 (Geog. of Risk) due	30 GCC, Coastal Flooding and Managed Retreat	31	1 (NOV) Social Infrastructure and GCC resilience
10	4 Scholarly skills workshop – writing op-eds	5 ELECTION DAY	6 Prep Stakeholder Debate	7	8 Stakeholder Debate on US Coastal/Flood Policy
11	11 Discuss Spring Registration procedures	12 Assignment 5 (Op-Ed) Due	13 Drought in Western US	14	15 Drought, Famine, and Hunger
12	18 Wildfires and GCC	19 Working bibliography for assignment 7 due	20 CA Wildfires case study	21	22 Tornadoes
13	25 Scholarly Skills Workshop	26 Assignment 6 (wildfires and GCC) due	27 THANKSGIVING BREAK	28 THANKSGIVING BREAK	29 THANKSGIVING BREAK
14	2 (DEC) Scholarly Skills Workshop	3	4 Oral Presentations	5 Assignment 7 (literature review) due	6 Oral Presentations
15	9 Oral Presentations	10	11 Oral Presentations LAST DAY OF CLASSES	12 STUDY DAY	13 STUDY DAY
F I N A L S	16 FINALS	17 FINALS	18 FINALS Final Writing Portfolio due	19	20