

NFS 114/FS 103: Human Health in the Food System
University of Vermont
Spring 2023

Instructor: R. Chris Skinner, PhD

Time: MW, 3:30-4:45

Location: Innovation Hall, E430

Office Hours: MWF 9:30-10:30 and Tuesday from 2:00-3:00 or by appointment

Office Location: 103 Morrill Hall

Contact: chris.skinner@uvm.edu

COURSE OVERVIEW

NFS 114/FS 103: This course explores the multifaceted and evolving intersection of food systems, dietary quality, food availability and human health outcomes. Investigates how political, economic, scientific, social, and cultural drivers in the food system influence human health outcomes. Nutrition is really a nexus of many things and we must do a better job at analyzing how all of these aspects fit together to influence what, how, and why a person eats the way they do. This is not simple and involves a lot of deep analysis and thought. My hope for this course is to give you a broad appreciation of the multi-layered complexity of nutrition and food and to inspire you to think differently about the way you perceive the impacts of diet on health.

A note: I am asking you to engage with difficult subject matter this semester. We will discuss concepts such as race, socioeconomic, nationality, privilege, and so on and try to untangle the complicated web of these concepts and food. Please know you may be exposed to new ideas, concepts, or perspectives and that is GOOD. I hope you get a little uncomfortable this semester and that I get a little uncomfortable too. With that being said it is imperative we remain respectful and cognizant of how our peers may feel. Please be kind, listen with intent, and speak with respect. Language or action that is disrespectful or harmful to others will not be tolerated.

LEARNING OBJECTIVES

At the end of this course students should be able to meet the following objectives:

1. List, define, and explain common terminology used to describe sustainable, resilient, and healthy food systems in regard to human health.
2. Discuss the many aspects that make up and food system and analyze their impacts of nutrition and health.
3. Discuss and examine how the social determinants of health impact food systems, nutrition, and health.
4. Discuss and explain practices and innovations in food systems, agriculture, and nutrition
5. Apply information to real-world scenarios regarding food systems, nutrition, and health

COURSE BASICS

Technical Support for students: Please read this technology checklist to make sure you are ready for classes. <https://www.uvm.edu/it/kb/student-technology-resources/>

Contacting the professor: Please feel free to email me with questions or concerns or stop by my office hours. Please note I am a human with a life and if you email me outside of normal working hours (8 AM to 5 PM) I may not respond immediately. You are free to email me outside of those hours, but I may not reply until the following day, or if it

is a weekend until Monday. That is okay! Please do not send an email and then follow-up an hour later if I have not replied. If it has been more than 36 hours during the week, it's fine to send a reminder or follow-up. I get a lot of emails and I might just miss it. In general, just be respectful of your professors and their time.

Pre-requisite: NFS 043 or NFS 073

Lecture Slides and Other Resources: Students are expected to study PowerPoints provided and read corresponding textbook chapters. All course materials, including handouts, presentations, and other materials provided to students for this course are protected intellectual property. As such, the unauthorized purchase or sale of these materials may result in disciplinary sanctions under the Campus Student Code.

Textbook: This class does NOT have a textbook. A critical aspect of science is reading primary and secondary literature, as well as performing verifications of sources from audio and video mediums. All readings, audio, and video we use in the class will be provided.

Attendance and Participation: Attendance for this course is NOT required. Please note for best success the instructor heavily recommends students attend class and actively engage in the content. I believe part of college is learning time management skills and taking care of yourself. I understand sometimes you will have more important things to take care of during this class time—that's part of life. If you miss class, you should speak with a classmate to get notes and refer to your syllabus for any assignments or activities you may have missed. **PLEASE do not email me and say "did I miss anything important?" Of course you did! That's the point of class.** Please do not come to class if you're feeling unwell. This is not just for COVID symptoms, but in general. Take care of yourself and your peers by staying home when you don't feel well. If for some reason I need to be absent, I will email you and we will arrange a method for class to continue.

Conduct in the classroom: You are free to use your cell phones to aid your learning experience, however excessive texting or social media use is prohibited. Laptop computers/tablets are permitted during lecture for the purpose of note taking. Please be considerate of your classmates by not talking during lecture. I totally get sometimes you have to respond to a text or take a call—sometimes I will have to do that too! But please know being on your phones throughout class isn't a good way to learn and you are spending money to learn. So don't waste your money or time. 😊

Course Format: This course will consist of lecture AND discussion. Talking to your peers about science is a really helpful exercise and we will do it A LOT. I will be monitoring discussion and if it is noted you aren't consistently engaging with each other, we will shift to another (much more boring and painful) strategy. The plan is to be lecture heavy on Monday and discussion heavy on Wednesday, along with working through case studies/questions/etc.

Grading and Assignment Overview:

You will have a variety of assignments throughout the semester. Because we each display our knowledge differently, these assignments provide different methods for you to showcase your learning. Please also note I am not a fan of busy working you to death and feel an important aspect of college is learning to study without being forced to do

excessive assignments. With that being said, finding ways to assess your knowledge is really important to ensure I am doing my job and you are actually learning. Additionally, small stakes assignments ensure you do not have extremely high-pressure exams that make or break your grade.

Group work: We will utilize group work to complete several assignments in this class. In the second week of the semester, I will assign you groups you will work with to complete quizzes and the final project. I know group work can be a pain, but the problems we face in food, agriculture, climate, science, and so on necessitate working with others. Regardless of the field you enter, you'll likely work with a team, so practice is really important. With each quiz a small section will be dedicated to providing feedback on the efforts of your group members. I know there are people who have a tendency to fade away and people who have a tendency to steam-roll.

Due dates and times: Research shows if you are given due dates at midnight, you will stay up late and turn things in right before midnight. College students notoriously don't sleep enough, which impacts grades, mental health, relationships, etc. So instead of the standard midnight deadline professors typically give out, we will use a 9PM deadline. I know some of you are going to hate this! That's okay. Adapting to change is a skill.

Case studies will always be due Sunday evening at 9PM. Quizzes will be due Tuesday nights at 9PM You will only have one assignment to complete max per week, so you should know either Sunday by 9PM or Tuesday by 9PM you will have something to submit (at least for most weeks). Do I really care if you turn something in at 9:01, 9:05, or 9:10? No! But please don't make a habit of turning things in late consistently. As a note, if you turn something in AFTER the Monday class you will be given a zero. We will start each Monday class with a brief review of the assignment to ensure everyone understands the concepts. It would not be fair to allow you to hear us discuss the answers and then submit the assignment.

Grading

Assignments	Total Points Possible
Case Studies (8)	400 points
Module Quizzes (3)	300 points
Group Project (1)	250 points
Final Exam (1)	50 points
Total Points	1000 points

Grading Scale:

A	900-1000 points
B+	865-<900 points
B	830-<865 points
B-	800-<830 points
C+	765-<800 points
C	730-<765 points
C-	700-<730 points
D+	665-<700 points
D	600-<665 points

F	Under 600 points
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Grades of A+ may be given out at the discretion of the professor based on the student going above and beyond in all aspects of the course.

Case studies: You will complete 8 case studies throughout the semester. These case studies will be multiple choice, true/false, etc and build towards the more complex quizzes. You are free to take these in groups, but everyone must submit their own unique case study. Case studies will be due Sunday nights at 9 PM.

Module quizzes: This course is subdivided into 4 parts—domestic food systems and nutrition, global/international food systems and nutrition, agriculture, innovation, and sustainability, and group presentations. The first 3 parts include a quiz to assess your knowledge on the subject. These quizzes will be open note and concept-based. You will be given a scenario or group of scenarios and asked to display your knowledge on these subjects. Please note these quizzes will be short-answer/essay format. These quizzes will be taken in groups. No quizzes will be given during the group presentation portion of the class. Quizzes will be due Sunday nights at 9PM. Each group will submit one quiz with everyone's name on it. Additionally, students will complete an evaluation survey on their group mate's teamwork/collegiality/effort/etc.

Group project: You will complete a group project on a topic of your choosing relevant to nutrition and food systems that we do not cover in-depth in class. You must have your topic approved by me. You can choose a variety of formats that fit your group's collective strengths. Projects can include but are not limited to standard presentations, podcasts, interviews, short videos, social media-based projects, etc. I want you to be creative and work to make something unique that is also informative. The point of these presentations is to educate your classmates and me. If you are struggling with coming up with a topic, some suggestions are below. Note that only one group can pick a topic so you should be thinking about what you want to cover early on. You don't have to pick from this list—be creative!

- Food systems, health, and the prison system
- Food systems, health, and the school system
- How infectious diseases impact the food system
- How media impacts food systems

Final exam: You will be assigned a final exam on the last day of class, and it will be due **May 8th at 9 PM**. You will complete it individually. It will be a 1-page maximum writing assignment.

Class Evaluation: A course evaluation will be administered in-class at the end of the semester. The evaluation is anonymous and used to help improve the course as well as for promotion and tenure decisions for the instructor. It is my expectation that you will complete the evaluation.

Late Policy, Excused Absences, and Disputing Grades: If you wish to dispute a quiz or assignment grade, you must do that within one week of when grades are posted. To dispute a grade you need to write a brief explanation of why you believe your answer was correct and email it to me.

COMMUNICATION

I want to facilitate your success in the course and will be happy to meet with you during office hours, or schedule an appointment as needed. Please try to come to office hours to get your questions answered, if it's impossible for you to come to office hours, and you want to set up an appointment with me, email me three possible times you can meet. Also, I do not generally answer emails during the evenings or weekends (work-life balance is important for health!), but I do promise to do my absolute best to get back to you within 1 working day.

How to Write an Email to a Professor: Sometimes students are confused about how to write an email to a professor. Using professional communication is important, and this class is a good chance to practice. A nice starting point is to say "Hi" or "Dear" and then the professor's name, ex: "Hi Dr. Skinner," or "Hi Prof. Skinner," or "Hi Chris." Examples of non-professional salutations would be "hey there," "hey," or "what's up." It's also not professional to send an email without a greeting AND a name. After your greeting, you then want to succinctly state your question or issue. If you need to meet with the email recipient, suggest three meeting times that would work for you. You can then close by writing your name. Below is an example of an appropriate email from a student to a professor.

Subject: NFS 114 question

Hi Dr. Skinner,

I was wondering if I could come meet with you to better understand the main types of carbohydrates. I can't make it to your office hours this week, but could meet on Monday from 12-1, Tuesday from 2-3, or Wednesday from 4-4:30?

Thank you,

Nandor The Relentless

COURSE POLICIES

Academic Integrity: UVM has an Academic Integrity policy that should be adhered to during this course. You can find a copy of the policy here:
<http://www.uvm.edu/policies/student/acadintegrity.pdf>.

Religious Holidays: Students have the right to practice the religion of their choice. Each semester students should submit, in writing to their instructors, by the end of the second full week of class, their documented religious holiday schedule for the semester. Faculty must permit students who miss work for the purpose of religious observance to make up this work.

Disability Accommodations: Students requiring special assistance due to a disability are asked to contact the instructor during the first week of classes so that reasonable accommodation for the disability can be determined and arranged. Disability documentation, testing, and accommodations are coordinated through the Student Accessibility Services office on campus: <http://www.uvm.edu/~access/>.

Academic-Athletic Conflicts: Student athletes need to notify me of any classes they may miss due to documented athletic conflicts by the end of the second week of the semester. We will then work on a plan to allow the student-athlete to make-up any work

they miss because of an athletic conflict.

UVM Final Exam Policy: This course will abide by the UVM Final Exam Policy: <http://catalogue.uvm.edu/undergraduate/academicinfo/examsandgrading/>.

Student Support Services: There are many student support services available to UVM students. You may find the following to be helpful throughout the semester and your time at UVM.

UVM Counseling and Psychological Services (CAPS) Office: <http://www.uvm.edu/~chwb/psych/>

UVM Living Well: <http://www.uvm.edu/~chwb/psych/?Page=outreach.html>

UVM Center for Health and Wellbeing: <http://www.uvm.edu/~chwb/>

Student Accessibility Services: https://www.uvm.edu/academicsuccess/student_accessibility_services

UVM Tutoring Center: https://www.uvm.edu/academicsuccess/tutoring_center

UVM Writing Center: <http://www.uvm.edu/wid/writingcenter/>

C.A.R.E.: If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

Alcohol and Cannabis Statement: As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- Cause issues with attention, memory and concentration
- Negatively impact the quality of how information is processed and ultimately stored
- Affect sleep patterns, which interferes with long-term memory formation

Student Health and Wellbeing: Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, having fun in moderation, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance, athletic performance and/or reduce your ability to participate in daily activities. All of us benefit from support during times of struggle. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is almost always helpful.

In addition to the resources on campus there are others in the community, and online/via phone for your spiritual, mental and physical well-being. If you are struggling with this class, please visit during office hours or contact me via email. Check-in with your academic advisor if you are struggling with multiple classes. Helpful, effective resources are available on campus, and most are free of charge. Support during a pandemic can be even more important but even harder to access, but there are resources available to you:

Student Services <https://www.smcvt.edu/student-life/housing-and-dining/living-at-saint-mikes/meet-our-staff/>

How to Prevent Loneliness in a Time of Social Distancing

<https://www.scientificamerican.com/article/how-to-prevent-loneliness-in-a-time-of-social-distancing/>

Suicide and Crisis

National Suicide Prevention Lifeline 1.855.CRISIS1

Self-Harm Hotline 1-800-786-4233

Chat with a crisis counselor through <https://www.imalive.org/>

Text messaging behavior health support line. Text START or HOME to 741741

<https://www.crisistextline.org/>

National Hopeline Network 1.800.442.HOPE

Student Veteran

Veteran Crisis Line 1.800.273.TALK or veterancriisline.net

LGBTQ

The Trevor Project 1-866-488-7386

www.Translifeline.org 877.565.8860

Sexual Assault/Violence

Sexual Assault hotline 1.800.656.4673

Domestic Violence hotline 1.800.799.7233

<https://www.vtnetwork.org/> 802.223.1302

General Resources

24/7 Student Assistance Program 800.327.2255

<http://www.halfopus.com/video/life-continued-defeating-depression/> for depression resources

<https://www.7cups.com/> to speak with a trained listener for free

<https://www.jedfoundation.org/im-having-trouble-sleeping/> for trouble sleeping

<https://www.jedfoundation.org/id-like-some-tips-to-manage-stress-and-worries/> for stress

<https://seizetheawkward.org/> to help a friend in need

<https://www.nationaleatingdisorders.org> for disordered eating

<https://colchesterfoodshelf.org/> for hunger and food needs

Adverse Weather Statement: In the event of inclement or threatening weather, everyone should use his or her best judgment regarding travel to and from campus. Safety should be the main concern. If you cannot get to class because of adverse weather conditions, you should contact your instructor as soon as possible. Similarly, if your instructor(s) are unable to reach the class location, they will notify you of any

cancellation or change as soon as possible, using agreed upon methods to prevent students from embarking on any unnecessary travel.

Changes to the Syllabus: The instructor reserves the right to amend or modify the syllabus and/or class schedule as deemed necessary. Any changes will be announced in class and posted on Canvas.

Date	Topic	Weekly Activity/Assignment	Readings, podcasts, videos, etc.
Week 1:			
W 1/18	<ul style="list-style-type: none"> Introduction Syllabus How to read, listen to, watch, and evaluate research 	Get familiar with Blackboard and the syllabus Case study #1 (syllabus)	Read: Syllabus Listen: Stuff They Don't Want You To Know: The Search for Bigfoot Watch: Vox Explained: Diamonds (in class)
Week 2:			
M 1/23 W 1/25	<ul style="list-style-type: none"> How to read, listen to, watch, and evaluate research What is a food system? How do food systems and nutrition impact health? 	Groups assigned Case study #2	Read: Food systems, nutrition, health and the environment, Dangour et al 2017 Listen: None! Watch: Tedx Talks: It's not food, it's the food system
Week 3:			
M 1/30 W 2/1	<ul style="list-style-type: none"> Social determinants of health in relation to food and nutrition 	Case study #3 Final project topic is due by 9 PM on 2/1.	Read: Associations between the neighbourhood food environment, neighbourhood socioeconomic status, and diet quality: An observational study by McInerney et al 2016 Disparities in access to fresh produce in low-income neighborhoods in Los Angeles by Algert et al 2006 Listen:

			Maintenance Phase: Is Being Fat Bad for You? Watch: None!
Week 4:			
M 2/6 W 2/8	<ul style="list-style-type: none"> ▪ Vermont food systems and security ▪ How place impacts a food system ▪ Food culture 	Case study #4	Read: Food access and security during coronavirus: a Vermont study by Niles et al 2020 How has the pandemic affected Vermonters' health? A new study offers insight by April Fisher 2022 Addressing food insecurity through a health equity lens: a case study of large urban schools districts during the COVID-19 pandemic by McLoughlin et al 2020 Listen: None! Watch: Parts Unknown: West Virginia (in class)
Week 5:			
M 2/13 W 2/15	<ul style="list-style-type: none"> ▪ Domestic issues in food 	Quiz #1	Read: None! Listen: The Social Breakdown: SOC408: Gentrification Through Food Watch: The food deserts of Memphis: inside America's hunger capital
Week 6:			
M 2/20 W 2/22	<ul style="list-style-type: none"> ▪ Global food security and systems 	Case study #5	Read: Future of food: exploring challenges to global food systems by Agrawal 2021

			<p>Listen: The Daily: How the war in Ukraine is creating a global food crisis</p> <p>Watch: None!</p>
Week 7:			
M 2/27 W 2/29	<ul style="list-style-type: none"> Famine, conflict, forced migration, and food systems and security 	Case study #6	<p>Read: Forced migration and food crises by Paniagua et al 2022</p> <p>Listen: Behind the Bastards: Edward Bernays part 1 and part 2</p> <p>Watch: None!</p>
Week 8:			
M 3/6 W 3/8	<ul style="list-style-type: none"> Climate, water, agriculture, and food 	Quiz #2	<p>Read: None!</p> <p>Listen: Climavores: where food and agriculture fit into America's big climate bill</p> <p>Watch: Vox Explained: The World's Water Crisis (watching in class)</p>
Week 9:			
M 3/13 W 3/15	<ul style="list-style-type: none"> Spring Break 	Spring Break NONE!	RELAX! Celebrate the return of light
Week 10:			
M 3/20 W 3/22	<ul style="list-style-type: none"> Agricultural practices and food 	Case study #7	<p>Read: Effects of on-farm diversification strategies on smallholder coffee farmer food security and income sufficiency in Chiapas, Mexico by Anderzen et al 2020</p> <p>Listen: Hobby Farms Present: Growing Good, Amy Dawson and Mike Costello</p> <p>Watch: None!</p>

Week 11:			
M 3/27 W 3/29	<ul style="list-style-type: none"> Sustainability, nutrition, and food Food waste and the food system 	Case study #8	<p>Read: Apple pomace improves liver and adipose inflammatory and antioxidant status in young female rats consuming a Western diet by Skinner et al 2019</p> <p>Listen: GastroPod: Black gold: the future of food... we throw away</p> <p>Watch: None!</p>
Week 12:			
M 4/3 W 4/5	<ul style="list-style-type: none"> Innovations in food systems and security 	No case study—this is that time in the semester where everyone’s starting to get burnt out. Instead, I want you to utilize the time to work on your projects.	<p>Read: The importance of food systems and the environment for nutrition, Fanzo, et al 2021</p> <p>Listen: None!</p> <p>Watch: Kurzgesagt: Are GMOs good or bad?</p>
Week 13:			
M 4/10 W 4/12	<ul style="list-style-type: none"> Food justice 	Quiz #3 Final projects are due on Sunday, 4/16 at 9PM.	<p>Read: None!</p> <p>Listen: Toasted Sister Podcast: Food sovereignty is economic sovereignty</p> <p>Watch: MAD: Culinary injustice Ted Archives: Gastronomy and the social justice reality of food</p>
Week 14:			
M 4/17 W 4/19	<ul style="list-style-type: none"> Group presentations 		<p>Read: TBD</p> <p>Listen: TBD</p> <p>Watch: TBD</p>
Week 15:			

M 4/24 W 4/26	▪ Group presentations/Flex		Read: TBD Listen: TBD Watch: TBD
Week 16:			
M 5/1 W 5/3	▪ Group presentations/Flex		Read: TBD Listen: TBD Watch: TBD
Final Exam			
	Given: May 5 th	Due: May 8 th at 9PM	