

Course Information

Course Number:	PH 2745 (or GSBS GS04)
Course Title:	Cancer Epidemiology
Semester:	Summer 2026
Credit Hours:	3
Format:	Online (Synchronous) This course is typically offered face-to-face/Microsoft Teams but will be offered synchronously online for Summer 2026. The sessions will meet synchronously Tuesday and Wednesday 12:00-1:50 PM.
Course Description:	This primarily introductory-level course reviews the causes of cancer and the epidemiology of cancer by anatomical site. The course will introduce seminal studies and current issues in cancer epidemiology, and will cover basic concepts pertinent to cancer epidemiology research including biology, pathology, statistics, classic and novel risk factors, prevention, and genetics. Selected publications from epidemiologic literature provide opportunity for student-faculty discussion.
Prerequisites:	SPH – Epidemiology I (PHM 2612) & Introduction to Biostatistics in Public Health (PHM 1690), or consent of instructor; GSBS – Foundations of Biomedical Research (GS21 1017), or consent of instructor

Instructor and TA Information

Instructor(s):	Qian Xiao, PhD (administrative lead for UTSPH) Qian.Xiao@uth.tmc.edu (713) 500-9233 UTSPH RAS E603 Office hours: By appointment. Students can contact instructors by email or phone to set up an appointment. Veronika (Nika) Fedirko, PhD, MPH (MD Anderson) VFedirko@mdanderson.org Larkin Strong, PhD, MPH (MD Anderson) LLStrong@mdanderson.org
TA(s):	TBD

Textbooks and Materials

- Required Text: None

- Recommended Texts: *(Review copies of recommended texts are on hold at the library)*
 - Fundamentals of Cancer Epidemiology by P. Nasca and H. Pastides
 - Cancer Epidemiology and Prevention by D. Schottenfeld & J.F. Fraumeni

Course Expectations, Attendance, and Participation

- Attend all course lectures and seminars, participate and ask questions
- Students must be present for the duration of 20 of the 24 class sessions (In order to be considered present students must arrive by 12:10 and stay until 1:40).
- Read the discussion articles for class seminars and participate in the seminar
- The use of generative AI tools (e.g. ChatGPT, Dall-e, etc.) is permitted in this course for the following activities:
 - Brainstorming and refining your ideas;
 - Finding information on your topic;
 - Drafting an outline to organize your thoughts; and
 - Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

- Completing group work that your group has assigned to you.
- Writing a draft of a writing assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

Course Learning Objectives

- Identify the most common types of cancer in the US and contrast them with the most lethal cancers in the US.
- Identify differences between the epidemiology and clinical aspects of different types of cancer
- Critically evaluate studies of environmental risk factors for the development of cancer
- Identify environmental risk factors for cancer that have the highest impact on the incidence of common cancers
- Critically evaluate studies of genomic risk factors for the development of cancer
- Identify genetic variants that have the highest impact on the incidence of common types of cancer
- Speak fluently about recent advances and emerging methodologies used in research in cancer epidemiology

List of Topics

- Introduction to Cancer Epidemiology
- Introduction to Cancer Biology, Genetics and Molecular Epidemiology
- Cancer risk factors
- Cancer outcomes research.
- Site specific cancers.
- Health behaviors and cancer.
- Resources for cancer epidemiology research.

Learning Activities

- Attend class
- Participate in class discussions and seminars
- Prepare to present each of the assigned journal articles. Articles will be provided 1 week or more prior to presentation date. For each discussion, several students will be assigned to give a 20-minute presentation. After the presentation students will be randomly selected to lead a class discussion of the article.

Student Assessment and Grading Criteria

Grading Breakdown

This course is **pass/fail**. In order to pass students must

- 1) be present for the duration of 20 of the 24 class sessions (In order to be considered present students must arrive by 12:10 and stay until 1:40);
- 2) complete make-up assignment for each class missed (see below);
- 3) present in one journal club discussion;
- 4) be prepared to lead classroom discussion for journal club discussions;
- 5) actively engage in classroom discussions.

Late/Make-Up Work Policy

- Make-up assignment: Students who miss a class session should submit make-up assignment: 1) For lectures, submit a written summary after reviewing the recorded lecture including two thoughtful questions for the lecturer. 2) For journal clubs, submit a 1-page critique. All make-up assignments are due within 1 week after the missed class.
- If students miss more than 4 class sessions they must withdraw from the class or receive a failing grade. In the event of illness or other emergency, students may take an incomplete and complete these activities sometime before the end of the fall semester. Incompletes will not be offered for students who miss more than 6 class sessions. All incompletes must be resolved before the end of Fall Semester.

To read the School of Public Health policy regarding course grading, see [Policy 201 Course Grading](#).

Technical Requirements

Prerequisites:

- SPH – Epidemiology I (PHM 2612) & Introduction to Biostatistics in Public Health (PHM 1690), or consent of instructor
- GSBS – Foundations of Biomedical Research (GS21 1017), or consent of instructor

Technical Requirements:

- No technical requirements

School of Public Health Policies and Procedures

E-mail Communication

Email accounts constitute the official mode of communication linking students, faculty, and/or administration. Consequently, students are responsible for maintaining the UTHouston email account assigned to them and activated upon payment of tuition and fees, and are responsible for regularly checking email messages.

Class Etiquette and Professionalism

In our current environment, video conferencing is the safest and most common way to do work in many settings. Online & live virtual class sessions are an opportunity to practice professional meeting etiquette. Consider the following norms:

- During lectures, we hope you keep your video on if possible to promote a sense of community and shared space.

- Make sure your name listed on Microsoft Teams is your preferred name. Consider adding your preferred pronouns to help your classmates and instructors refer to you in the right way.
- Choose a place to sit that has a background that you feel comfortable sharing with your colleagues and instructors. You could also choose to use a “virtual background” as long as it is not distracting.
- Use the chat function to ask questions during full-group sessions, and also to alert us if you have a technical difficulty. Most often, your chat will be set to engage with the teaching team during the first half of class in order to keep the lecture moving. Other times, you will be able to chat with all students.
- Raise your Microsoft Teams “hand” to alert the facilitator that you wish to speak, and wait to be called on before unmuting yourself.
- If you are in a breakout room and need to get the attention of an instructor, please click the “Ask for Help” button in Microsoft Teams and we will be alerted.
- Unless you are speaking, keep your own audio muted to prevent background noise from disturbing the session.
- If there is a loud background noise while you are contributing to the class session unmuted (e.g. a dog barks or a car beeps), wait until the noise stops and then keep talking. Remember to give grace and understanding if this happens to one of your classmates (or to us!).
- We will occasionally record panels and guest lectures for future use. These recordings are the intellectual property of the faculty and they may not be shared or reproduced without the explicit, written consent of the faculty member. Further, students may not share these sessions with those not in the class, or upload them to any other online environment. Doing so would be a breach of the Policy on Student Academic Conduct Standards and Procedures, and, in some cases, a violation of the Federal Education Rights and Privacy Act (FERPA).
- Please be in touch with the teaching team if you are concerned about privacy and do not want to be recorded.

Student Technical Requirements

Students at UTHealth Houston School of Public Health must have a personal computer (i.e. laptop or tablet) available to them as a graduate student. For software not provided through the virtual computer lab, the school provides reduced software prices through the [UT Bookstore](#) for certain required software titles, including Windows Operating System, MacOS, Microsoft Office, and certain statistical software products required to use during study. For compatibility purposes, students should have access to a personal computer running the latest version of either the Windows Operating System or Macintosh Operating System. However, students should note that the most commonly used platform is the Windows Operating System.

All students are provided with the UTHealth Houston user account, which offers access to a web-based electronic mail application (Outlook), an online learning management system (Canvas), the ability to connect personal wireless computers within campuses, and a file repository and sharing system.

All students need to have a computer with the following minimum requirements and recommendations:

Operating System	Windows 10 or higher, Mac OS X 11.1 (Big Sur) or higher
Web Camera	Resolution at least 1280 x 720, should also include a microphone
Memory (RAM)	8 GB minimum, 16 GB or more is recommended
Browser	Edge Chromium, Chrome, Firefox

Internet Speeds	Preferred: DSL and Cable connectivity from outside the campus. Dialup and ISDN services will not provide enough bandwidth for most applications to function properly.
Antivirus Software	You must have Antivirus software. Windows 10 has built-in anti-virus software (Defender). Sophos Antivirus for Mac users is free.
Proctor Software	You can test your system's compatibility with our proctor solution at, http://www.proctoru.com/testitout/ .
Other Software	Access to most course software through a virtual computer lab environment is provided. This system is called Parallels. You can gain access to the software and instructions for configuring the software on the "Students" section of the IT Services website. Parallels software clients are available for both Windows and Mac operating systems. Additionally, Microsoft Office is the primary application tool used by all faculty. Regardless of your operating system, you will be most compatible with your faculty if you have Microsoft Office installed.

Withdrawal Information

Refer to the UTHouston's [Registrar's Office website](#) for information and deadlines to drop a course before the census date, including the associated refund schedule. Refer to the [SPH Academic Calendar](#) for withdrawal deadlines for the term. Students who choose to withdrawal from a course may do so by completing the UTHouston [withdrawal form](#) and submit it to the SPH Office of Academic Affairs and Student Services with the faculty's signature. This may be submitted either in-person or by emailing the completed form to SPHStudentServices@uth.tmc.edu. The Office of Academic Affairs and Student Services must receive this form by 5:00pm on the withdrawal deadline for the request to be processed. More information can be found in [Policy 103 Drop Date Deadline for Courses](#).

Incomplete Grades

A grade of incomplete ("I") may be issued when course requirements have not been satisfied because of the student's extenuating circumstances. It is recommended that the student have completed at least 50% of the course curriculum requirements for a grade of "I" to be issued. The student is required to complete all outstanding coursework by the end of the following semester or the incomplete grade will be converted to a grade of "F", as stated in policy 201. If the student requires additional time to resolve the incomplete grade, an extension can be requested by the course faculty member. If an incomplete is granted, a completed [Incomplete Grade Form](#) must be submitted to the Office of Academic Affairs and Student Services at SPHStudentRecords@uth.tmc.edu.

- Contact Dr. Xiao (in person or via email) to request an incomplete. Incompletes will not be offered to students who miss more than 6 class sessions

SPH Library & Writing Support Services

The mission of the UTHouston School of Public Health Library & Graduate Communication Center is to provide primary information support services for the education, research, and community health services programs of the faculty, students, and staff. Writing Support Services offers public health communication skills training, with a focus on writing. Instruction is provided in the areas of English as a Second Language (ESL), Academic, and Scientific Writing. During each writing consultation, the training specialist will work with you to meet your and your instructor's goals for a particular writing assignment. SPH Writing Support Services will assist you in many areas of writing to help you take responsibility for your own writing.

SPH Writing Support Services is located in the SPH Library (RAS E-125) in the Houston campus, but it is available to students at all SPH campuses via Microsoft Teams. To schedule an in-person appointment or an Teams session with SPH Writing Support Services, please call 713-500-9121 or e-mail SPHWritingHub@uth.tmc.edu.

The UTHealth Houston School of Public Health Library & Graduate Communication Center is a member of the Texas Health Science Libraries Consortium (THSLC), which is the collaboration of health science libraries in the Houston-Galveston area. The THSLC leads and encourages collaboration through shared digital library environments and resources to provide access to the world of information for its educational, clinical, and research communities. For more information, see the [Library & Graduate Communication Center website](#).

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Individuals found guilty of academic dishonesty may be dismissed from the degree program. It is a student's responsibility to have a clear understanding of how to reference other individuals' work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. Any student accused of a specific act stated in the previous paragraph is subject to UTHealth Houston School of Public Health academic policies and procedures pertaining to violations of the student code of conduct for academic integrity. Each student in this course is expected to abide by the UTHealth Houston School of Public Health Honor Code signed at first matriculation. Any work submitted by a student in this course for academic credit will be the student's own work.

You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e-mail, an e-mail attachment file, a diskette, or a hard copy.

During any quiz or exam you must do your own work. Talking or discussion is not permitted during a quiz or exam unless specifically stated, nor may you compare papers, copy from others, lend or borrow calculators, or electronic devices, or collaborate in any way unless specifically stated. Any collaborative behavior during a quiz or exam may result in failure, and may lead to failure of the course and UTHealth Houston SPH disciplinary action. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both held accountable.

Please remember that you signed the academic integrity policy at orientation. No academic dishonesty of any kind (including copying/plagiarism) will be tolerated. All suspected academic dishonesty (actual or attempted) or other violations of the student code of conduct will be immediately reported to the UTHealth Houston School of Public Health Assistant Dean of Students. To read the complete policy, see [Policy 186 Student Conduct and Discipline](#) in the Handbook of Operating Procedures (HOOP).

Generative Artificial Intelligence (AI)

Generative AI describes algorithmic tools (such as ChatGPT, DALL-E, and others) that can be used to create new content, including audio, code, images, text, simulations, and videos. Each faculty will decide to which extent, if any, the use of generative AI tools will be accepted in their course. See the Course Expectations, Attendance and Participation section in this syllabus for more information. If prohibited in the course, the use of generative AI constitutes academic dishonesty if the work is presented as the student's own.

ADA Accommodations

Students seeking reasonable accommodations related to disability, pregnancy and parenting, or religion must initiate the accommodation process by contacting the designated Section 504 Coordinator, Dr. Melissa Peskin, Assistant Dean of Students at Melissa.F.Peskin@uth.tmc.edu and completing a request form found on the [Equal Opportunity webpage](#). The individual, Section 504 Coordinator, and applicable faculty will engage in an interactive

process facilitated by the Equal Opportunity Office to determine if it is possible to grant reasonable accommodation, so long as it does not create undue hardship or fundamental alteration of an academic program.

Accommodations are not retroactive, and arrangements may differ for each course; therefore, if accommodations have already been granted for the upcoming semester, please meet with your Section 504 Coordinator, Dr. Melissa Peskin, as soon as possible to allow adequate time to develop an implementation plan together. For more information, please contact your Section 504 Coordinator or Equal Opportunity at 713-500-CALL or CALL@uth.tmc.edu.

Title IX

The University of Texas Health Science Center at Houston is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in education programs or activities; Title VII of the Civil Rights Act of 1964, which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act), Violence Against Women Act, and Clery Act. Sexual Misconduct and other conduct prohibited under this Policy will not be tolerated and will be subject to disciplinary action. To read the complete policy, see [Policy 59 Prohibition of Sexual Harassment & Sexual Misconduct](#).

Student Academic Grievance Process

The School of Public Health expects its students to put forth their best effort and assume the primary responsibility for meeting their academic and professional goals, but recognizes that there may be instances when students raise academic grievances. Students should first attempt to resolve their academic grievance informally, such as meeting with their faculty member, their faculty advisor, and/or the department chair. When these informal methods do not resolve the student's grievance, students may request a review and recommendation from the Academic Grievance Committee through its Academic Grievance Resolution Process. To read the complete policy, see [Policy 100 Student Academic Grievance Process](#).

UTHealth Houston Student Health & Counseling Services

The UTHealth Houston Student Health & Counseling Services provide integrated healthcare addressing students' physical and mental wellbeing needs at one place. Student Health and counseling services are available to all UTHealth Houston students. For more information, visit the [Student Health & Counseling Services website](#).