# College of Health Sciences
## Department of Public Health Sciences
### Health Promotion Program Syllabus

<table>
<thead>
<tr>
<th>Course name:</th>
<th>Introduction to Epidemiology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course no.:</td>
<td>HSCI 3311</td>
</tr>
<tr>
<td>Course CRN:</td>
<td>20987</td>
</tr>
<tr>
<td>Semester/year</td>
<td>Spring 2020: January 21st through May 7th, 2020</td>
</tr>
<tr>
<td>Undergraduate credit hours:</td>
<td>3</td>
</tr>
<tr>
<td>Class location:</td>
<td>Health Sciences &amp; Nursing Buildings, room 211</td>
</tr>
<tr>
<td>Class meeting time:</td>
<td>Thursday’s of every week from 9:00-11:50</td>
</tr>
<tr>
<td>Class instructors:</td>
<td>Dr. Gabriel Ibarra-Mejia</td>
</tr>
<tr>
<td>Contact method:</td>
<td>Email, phone, or scheduled video conference through Skype</td>
</tr>
<tr>
<td>Phone:</td>
<td>(915) 747-7270 (voice mail)</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:gabmejia@utep.edu">gabmejia@utep.edu</a></td>
</tr>
<tr>
<td>Preferred contact method:</td>
<td>Email</td>
</tr>
<tr>
<td>Assigned TA:</td>
<td>TBD</td>
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</tbody>
</table>

### Course description:
This course will provide the students with an understanding of the concept of epidemiology, the application of statistical tools, and biomedical information. Students interested or considering being involved in public health, public health education, community service, policy-related jobs, or pursuing a research-related career should enroll in this course.

### Course prerequisites:
In order to register for this course, the student must have completed and passed the following prerequisite courses: HSCI 3308 (Disease Characteristics, Prevention, and Control), MATH 1320 (Mathematics for Social Sciences), and PSYC 1303 (Statistical Methods). For authorization, send an email with personal academic information to gabmejia@utep.edu.

### Required textbooks:
None required

### Required and Supplemental readings:
Posted for each module in the Blackboard Learn Platform.

### Course format:
The course is offered as a full, face-to-face course, complemented through the Blackboard Learn platform. Attendance is mandatory. There will be lectures, discussion board topics, case study reviews, required book and outside materials’ reading, individual or group projects, weekly quizzes, midterm, and final exam. All interactions between the instructor and students will be carried by email, Blackboard Learn platform, assigned TA office hours, or instructor’s office hours. In exceptional cases, a telephone or through a video conference meeting. Class materials and assignments will be released weekly and the students will have the opportunity to complete all assignments at their own pace to meet the deadlines. All class materials and assignments will comply with ADA standards. **NOTE: GRADUATE LEVEL STUDENTS REQUIRE COMPLETION OF ADDITIONAL COURSE WORK.** Graduate students will be held to a higher standard compared to the undergraduate students in this course for grading purposes. Graduate students registered for this course must develop and carry out a research protocol based on a literature review for appropriate credit. Also, graduate students will not be part of any group and would be doing the class projects and assignments on their own. Check with the instructor for further details.
Course requirements:

**Time commitment is essential to complete the course requirements.** Students are expected to complete all in-class and online (Blackboard Learn) materials and assignments. It is also expected that students have the sufficient level of proficiency using Blackboard. Learning techniques will emphasize a critical thinking approach to learning. A critical thinking approach takes the view that a student’s knowledge is not passively absorbed. In contrast with other learning techniques, critical thinking assumes students will create knowledge in their minds by actively thinking about the material. It is going to be crucial that students prepare for each lesson, reading and reviewing the material before engaging in lessons and assignments. Still not quite certain about what critical thinking really is? Visit then the “The Critical Thinking Community,” available at: http://www.criticalthinking.org/pages/defining-critical-thinking/766

Using this method, students will apply the gained knowledge to solve common and practical problems related to the research process. Because the course is designed to challenge students intellectually, therefore, students may be required to cover additional materials and conduct activities to complete assessments and assignments. Additional readings and assignments are as a springboard for all activities and discussions, and ALL course materials are testable. Additional, but not all resources, course material, readings, etc. will be made available through UTEP’s Blackboard Learn system.

Each student will be required to interface with the Blackboard Learn platform. Therefore it is expected each will have the required technical tools and support to use and complete the online sections of the course, including a computer, internet access and connectivity. If a student does not own a computer, check with the institution’s resources and campus library to use a computer. Also, each student should have the knowledge and skills to use word processing, spreadsheet, visual media software, as well as the capacity to open pdf-type files and have sufficient proficiency in using Blackboard. Learning how to use other software such as SPSS may be required. If students are not familiar with Blackboard Learn or other required programs, contact UTEP’s Technology Support for available training and specific questions at 915-747-4357 or helpdesk@utep.edu. **Students are responsible for maintaining internet connectivity at all times while working on Blackboard Learn. Students will not be allowed to re-submit an assignment or quiz because of internet connectivity issues, NO EXCEPTIONS.**

Major learning objectives (must be numbered)1:

**After completing the course, the student will be able to:**

1. Basic (demonstrated through individual and group RAT activities):
   a. Describe the historical roots of epidemiologic thinking and their contribution to the evolution of the scientific method.
   b. Explain how ethical principles affect epidemiologic research.
   c. Use rates and proportions to numerically express the amount and distribution of health- and non-health related outcomes.
   d. Use the distribution of a health-related outcome in groups to generate hypotheses that might provide a causal explanation.
   e. Explain basic statistical and epidemiologic concepts of estimation, inference, and adjustment to establish an association.
   f. Explain how to use evidence of an association to make a judgment about whether an association is causal using the principles of contributory cause.
   g. Describe the basic epidemiologic study designs used to test hypotheses, identify associations, and establish causation.
   h. Apply the concepts of benefits, harms, and cost to a public health decision.
   i. Describe the concepts of measurement of test performance and be able to apply the concepts of testing and screening in different settings.
   j. Describe the broad applicability of epidemiologic methods to clinical and basic science as well as public policy.
2. Advanced (demonstrated through 4S activities):
   a. Analyze the evidence for and against a recommendation for intervention.
   b. Synthesize epidemiological methods to assess the strengths and weaknesses of assertions in the scientific literature and popular press.
   c. Evaluate the design of an epidemiologic investigation, demonstrating the ability to reconcile scientific validity and ethical sensitivity.
   d. Analyze a public health problem (e.g., investigation of a disease outbreak).

Course outcomes/competencies lined with NCHEC Health Education Specialist:

After completing the course, the student will demonstrate the following learning outcomes/competencies (under review):
1. Assess needs, assets and capacity for health education.
2. Conduct evaluation and research related to health education.
3. Work individually and within a group-setting to produce an undergraduate-quality level reports.
4. Communicate effectively in written and electronic modes of communication
5. Serve as health education resource person.

Assessment strategies:
1. In-class modular individual readiness assurances test (iRAT) and team readiness assurance tests (tRAT) after completion of required readings.
2. In-class team application tasks or 4-S TEAM activities after being presented with a complex question, problem or scenario.
3. Midterm and final peer feedback and evaluation from the rest of the group members (extra credit). This will be based on the level of active participation demonstrated by leadership initiatives and facilitation of group assignments.
4. Final comprehensive exam exam based on covered reading materials, assignments, and discussions up to the week before examination date.
5. Completion of service learning hours associated with public health activities.

Grading scale & criteria
Completion of the course will require that the student fulfills the following:

Grading scale:
- >90% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- <60% = F

Grading components:

<table>
<thead>
<tr>
<th>Type</th>
<th>Point Value</th>
<th>Weighted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>iRAT’s (estimated: 6 at 10 points each)</td>
<td>0-60</td>
<td>25%</td>
</tr>
<tr>
<td>tRAT’s (estimated: 6 at 10 points each)</td>
<td>0-60</td>
<td>25%</td>
</tr>
<tr>
<td>4-S TEAM activities (estimated 6 at 10 points each)</td>
<td>0-60</td>
<td>40%</td>
</tr>
<tr>
<td>Final examination</td>
<td>0-100</td>
<td>10%</td>
</tr>
<tr>
<td>Peer feedback and evaluation (extra credit)</td>
<td>0-20</td>
<td>0%</td>
</tr>
<tr>
<td>Service learning (extra credit; 1-point per hour)</td>
<td>0-20</td>
<td>0%</td>
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Dropping the course, withdrawals, and incomplete:
Students may drop individual courses or completely withdraw from the university and grades are based on when the actions are taken. Refer to the online Academic Calendar at www.utep.edu/calendar.

Grading policies for dropping the course:
a) Student-initiated Drops
### course, withdrawals, and incomplete:

It is the student’s responsibility to officially drop a course that she/he no longer wishes to take. Failure to do so may result in a grade of “F” on the student’s academic record. Athletes must receive permission from the Miner Athletic Advising Center before dropping a course. International students with F or J visas must receive permission from the Office of International Programs before dropping a course.

#### b) Administration Drops

During registration periods for upcoming semesters, students will be dropped from registered courses for failure to meet prerequisites or co-requisites after final grades have been posted for the current semester and before the beginning of late registration for next semester. A student may petition the department chair of the course in question for a prerequisite or co-requisite waiver.

At the discretion of the instructor, a student may be dropped from a course because of excessive absences or lack of effort. Students may also be administratively withdrawn from a course during the semester for other reasons, with the concurrence of the academic dean or department chair. A grade of “W” will be assigned before the course drop deadline and a grade of “F” after the course drop deadline. A grade of “F” received due to disciplinary action imposed by the University overrides a grade of “W” received through a student-initiated or faculty drop. Students will be notified of their drop through their UTEP e-mail account.

#### c) Grade Assignment for Drops and Withdrawals

Grades will be assigned as follows when a student drops a course or completely withdraws from the University:

1. If a student drops a course before the official census date of a semester, neither the course nor a grade will appear on the student’s academic record.
2. If a student drops from a course after the census date but before the student-initiated course drop deadline listed in the Class Schedule, a grade of “W” will be assigned.
3. If the student drops after the student-initiated course drop deadline, instructors will determine a grade of “W” or “F” for each course. A grade of “W” is considered only under exceptional circumstances and must be approved by the instructor and department chair for the course. A student may petition for a grade of “W” in writing with the necessary supporting documentation.

#### d) Incomplete course work

An “I” (incomplete grade) can only be considered only if requested by the student in advance of the conclusion of the course and only for legitimate, documented emergencies. Failure to request and negotiate the terms of an “Incomplete” grade before the conclusion of the course will result in a denial except in the most extraordinary circumstances.

### Course/Instructor & Institutional Policies

#### Attendance:

Although attendance is an essential component of this course and information not contained in the textbook will be presented during class through lectures and discussions, there will be no roll-call or taking attendance. However, not being in class every time and on time will significantly affect final grades. Therefore, we recommend:

| a) | Attend all classes and be punctual (no later than 15 minutes after scheduled time start). |
| b) | Avoid being late to class; students are discouraged from coming to class late or leaving early since this is disruptive to the instructor and more importantly, to classmates. Furthermore, each time a student is late, he/she will miss the graded activities without the possibility of making up for them or rescheduling. |
| c) | Absences will affect the final score/grade. Each time a student is absent, he/she will miss the graded activities without the possibility of making up for them or rescheduling. |
d) Students will only be able to make up for activities, exams, or assignments (scheduled or unscheduled) in the case of University excused absences (sponsored activities approved by the Dean of students). Must turn-in appropriate proof justifying absence within one week of the event.

e) Active student participation in this course is critical. Students must be prepared before every class every week. Students must be prepared to engage in instructor and student-lead discussion, formulate and answer, and in general, be actively engaged in all course activities. Participation can also be tracked through the completion of assignments/activities, total time spent online accessing Blackboard materials, etc.

### Course Etiquette:
Please respect each other’s opinions and allow everyone in the class to have a chance to give their insight. Zero tolerance for foul language used in any way when interacting with other students and professors.

### Communication and Feedback Plan:
Email is the best method to approach the instructor for when having questions regarding the course materials (gabmejia@utep.edu). The instructor or TA will usually reply within 24 hours. In the email, please type in the subject line “Epidemiology Course,” and in the message explain in complete sentences the question or problem you may have. A phone or video conferencing appointed can be set up if needed.

### Student Progress:
Grades and feedback on grades will be available through Blackboard Learn Grade Center. Additional feedback may be sent from the instructor by email.

### Reading Assignments:
All assigned readings need to be completed before coming to the next scheduled class session. Example: the reading assignments for week 2 need to be completed before coming to the week 2 class session.

### Online Midterm and Final Examinations:
PENDING

### Quizzes or Readiness Assurances Tests:
One individual readiness assurances test, one team readiness assurances test, and one 4S activity will be given along with each of the course modules. Each is worth a maximum of 10 points. However, each quiz type is weighted differently. There will be a limited time to complete them depending on quiz or activity type. Scores will be posted later, after the class has ended, on Blackboard Learn Grade Center once graded.

Absences are not an excuse to miss quizzes or other graded activities. No-rescheduling or re-taking of quizzes will be allowed, except in extraordinary cases and with prof of a University-approved excuse.

### Discussion Board Posts:
A section on Blackboard will be set up for general discussion topics. These will be and accessible throughout the semester. The purpose is to include discussion interactions between all those involved in the course.

### Final Project:
THIS COURSE DOES NOT CONTEMPLATE COMPLETING A FINAL, COURSE PROJECT.

### Group Work:
All group work will be conducted during class time. Nowadays, collaboration is a highly regarded skill. Groups will be assembled during the first week of the course. During this time period, students will not be given the option of freely assemble. The instructor will assign students to groups at random. The maximum number of members in a group is six (6). Please avoid including yourselves in a group to which you have not been invited and accepted.

Although, group work should be equally distributed, each group will appoint a “Group Leader” who will be the liaison between the group and other groups and the instructor. This does not apply to single-member groups. When completing a group assessment, the score will be the same for all members. However, at the end of the course, each group member will complete a peer evaluation in which students will evaluate, and rank member’s
participation to receive proper merit in the form of extra credit points. Changing groups, dropping or joining others are allowed only under extraordinary situations.

**Writing standards:**


All written documents should be double spaced, 1 inch margins, and Times New Roman font size 12. Please feel free to seek out assistance from the UTEP Writing Center or other writing support. The UTEP Writing Center is free and they are very helpful.

**Late assignments:**

Due dates for homework, quizzes, exams, presentations and other assignments are designed for fairness to all students. No exceptions to those dates will be made except in cases of university-designated closures. All assignments are due on the due date. A 10% of total point-value will be deducted for each day an assignment is late (including weekend days).

**Permission to record lectures & discussions:**

Not permitted without express permission of the instructor.

**Instructor’s and course evaluation:**

The instructor will provide with more details on how the course will be evaluated. There is an internal evaluation and a University standard online evaluation in which you will have the opportunity to rate the instructor’s performance and the course content. It is recommended that you complete these evaluations so that we continue improving the course.

**Accommodations for individuals with disability:**

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University.

Learn more here: UTEP Center for Accommodations and Support Services

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

**Field trips:**

There are no scheduled field trips in this course. However, there is always the possibility of outside activities, weather permitting.

**Copyright and fair use requirements:**

The University requires all members of its community to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The University will neither protect nor defend you on or assume any responsibility for a student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies.

**Student conduct and scholastic dishonesty:**

Students are expected to be above reproach in all scholastic activities. Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. “Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another student, any act designed to give unfair advantage to a student or the attempt to commit such acts.” Regent’s Rules and Regulations, Part One, Chapter VI, Section 3.2, Subdivision 3.22. Since scholastic dishonesty harms the individual, all students, and the
integrity of the University, policies on scholastic dishonesty will be strictly enforced. From
the UTEP Dean of Student Affairs (http://studentaffairs.utep.edu/Default.aspx?tabid=4386)
“It is an official policy of university that all suspected cases or acts of alleged scholastic
dishonesty must be referred to the Dean of Students for investigation and appropriate
disposition. Any student who commits an act of scholastic dishonesty is subject to discipline.
Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the
submission for credit of any work or materials that are attributable in whole or in part to
another person, taking an examination for another person, any act designed to give unfair
advantage to a student or the attempt to commit such acts”.

Examples of “cheating” include:

- Copying from the homework, in-class work or exam paper of another student,
  engaging in written, oral, or any other means of communication with another student
during an exam or homework assignment, or giving aid to or seeking aid from
another student during a test;
- Possession and/or use during an exam or home test of materials which are not
  authorized by the person giving the test, such as class notes, books, or specifically
designed “crib notes”;
- Using, obtaining, or attempting to obtain by any means the whole or any part of non-
  administered test, test key, homework solution, or computer program; using a test
  that has been administered in prior classes or semesters but which will be used again
  either in whole or in part without permission of the instructor; or accessing a test
  bank without instructor permission;
- Collaborating with or seeking aid from another student for an assignment without
  authority;
- Substituting for another person, or permitting another person to substitute for one's
  self, to take a test;
- Falsifying research data, laboratory reports, and/or other records or academic work
  offered for credit.

“Plagiarism” means the appropriation, buying, receiving as a gift, or obtaining by any
means another's work and the unacknowledged submission or incorporation of it in one's
own academic work offered for credit, or using work in a paper or assignment for which the
student had received credit in another course without direct permission of all involved
instructors. NOTE: This includes cutting-and-pasting and photocopying from on-line and
other material.

“Collusion” means the unauthorized collaboration with another person in preparing
academic assignments offered for credit or collaboration with another person to commit a
violation of any provision of the rules on scholastic dishonesty.
| **Student resources:** | UTEP provides a variety of student services and support. Familiarize yourself with the bookmarks on the right-hand side of the Blackboard student portal (visible before entering into a course) as well as the resources below.  
• UTEP Library: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.  
• RefWorks: A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.  
• University Writing Center (UWC): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.  
• Math Tutoring Center (MaRCS): Ask a tutor for help and explore other available math resources.  
• History Tutoring Center (HTC): Receive assistance with writing history papers, get help from a tutor and explore other history resources. |
<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Course activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course introduction:</strong> Week 1</td>
<td>Welcome • Course details, outcomes and expectations • Team building</td>
<td><strong>Readings:</strong> • Course syllabus and organization – PBL &amp; TBL • Review of Blackboard Learning Platform</td>
</tr>
<tr>
<td><strong>Module 1:</strong> Weeks 2-3</td>
<td>History, Philosophy, and Uses of Epidemiology</td>
<td><strong>Readings:</strong> • Chapter 1 • Assigned readings (Blackboard) <strong>Assignments:</strong> • Complete iRAT • Complete tRAT • Complete 4S Activity</td>
</tr>
<tr>
<td><strong>Module 2:</strong> Weeks 4-6</td>
<td>Descriptive Epidemiology</td>
<td><strong>Readings:</strong> • Chapter 2 • Assigned readings (Blackboard) <strong>Assignments:</strong> • Complete iRAT • Complete tRAT • Complete 4S Activity</td>
</tr>
<tr>
<td><strong>Module 3:</strong> Weeks 7-8</td>
<td>Association and Causation</td>
<td><strong>Readings:</strong> • Chapter 3 • Assigned readings (Blackboard) <strong>Assignments:</strong> • Complete iRAT • Complete tRAT • Complete 4S Activity</td>
</tr>
<tr>
<td><strong>Module 4:</strong> Weeks 9-11</td>
<td>Analytic Epidemiology</td>
<td><strong>Readings:</strong> • Chapter 4 • Assigned readings (Blackboard) <strong>Assignments:</strong> • Complete iRAT • Complete tRAT • Complete 4S Activity</td>
</tr>
<tr>
<td><strong>Module 5:</strong> Weeks 12-13</td>
<td>Evidence-Based Public Health</td>
<td><strong>Readings:</strong> • Chapter 5 • Assigned readings (Blackboard) <strong>Assignments:</strong> • Complete iRAT • Complete tRAT • Complete 4S Activity</td>
</tr>
<tr>
<td><strong>Module 6:</strong> Weeks 14-15</td>
<td>Applications to Policy and Basic and Clinical Sciences</td>
<td><strong>Readings:</strong> • Chapter 6 • Assigned readings (Blackboard) <strong>Assignments:</strong> • Complete iRAT • Complete tRAT • Complete 4S Activity</td>
</tr>
<tr>
<td>Week 16</td>
<td>Final exam</td>
<td><strong>Assignments:</strong> Complete written examination on scheduled date and time • Turn in all pending proof of extra credit assignments (Due Date: 05/8/2020 5:00 PM MT).</td>
</tr>
</tbody>
</table>

* Note: The course syllabus is a general tentative plan for the course. Any changes will be announced to the class in advance by the instructor.

Last Revised on 01/21/2020