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PUBH 7890 – Directed Independent Study

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Georgia Southern University Jiann-Ping Hsu College of Public Health

PUBH 7890 – Directed Independent Study

Fall, 2018

Instructor: Jian Zhang, MD. Dr. PH.
Office: 2032, Hendricks Hall
Phone: (912)-478-2290 (office, rarely used), (678)-814-3788(cell)
E-Mail Address: Jianzhang@georgiasouthern.edu (best way to reach instructor)
Office Hours: Monday 3:30 PM - 5:30 PM
Tuesday 11:00 PM - 3:00 PM
Consultation appointments are available on an as-needed basis.
Class Meets: Instructor's office unless notified otherwise.
Class Time: Once a week on a mutually convenient time

Course Catalog available at:

<http://em.georgiasouthern.edu/registrar/resources/catalogs/>
under Jiann-Ping Hsu College of Public Health Programs

Prerequisites:

BIOS 6331 – Regression Analysis in Biostatistics (3)
BIOS 7131 – Survival Analysis (3)
BIOS 6531 – Categorical Data Analysis (3)
EPID 7131 – Research Method I
EPID 7132 – Research Method II
EPID 9231 – Chronic Disease Epidemiology

FOLIO Access: <https://georgiasouthern.desire2learn.com/d2l/home/458966>

Catalog Description

Provides the student with an opportunity to investigate an area of interest under the direction of a faculty mentor.

Required Textbook:

1. No required textbook
2. Supplemental reading materials will be provided by the instructor and accessible online at the course website.

3. Some papers recommended by instructors may be accessible online depending on University of Georgia Southern's subscription.

Competencies for DrPH program of epidemiology

Cross-cutting Competencies for DrPH program of epidemiology

1. Apply evidence-based practice, generation of practice-based evidence, and leadership positions that apply and synthesize translational and implementation science findings in governmental, non-profit, and private-sector settings as well as teaching, research, and service in academic roles at the undergraduate and graduate level.
2. Demonstrate the ability to generate products that discover, apply and synthesize evidence from a broad range of disciplines and health-related data sources, in order to advance programs, policies, or systems addressing population health. Learning products may be created in a range of formats.
3. Demonstrate leadership in increasingly interdisciplinary, interprofessional, and crosssectional roles and settings.
4. Develop innovative, current, and proactive approaches to adapt to the ever-changing public health systems and health care landscape.
5. Explain a core, interdisciplinary orientation toward evidence-based public health practice, leadership, policy analysis and development, evaluation methods, and translational and implementation research to generate practice-based evidence.
6. Demonstrate an ability to work in a global context, recognizing the relationships among domestic and global issues.

Epidemiology Concentration

1. Design a public health and epidemiological investigation in terms of experimental design, data to be collected that reflect the research objectives, and specification of appropriate methods of analysis.
2. Analyze public health and epidemiological data using appropriate statistical software such as SAS and R.
3. Develop new epidemiological methods and new ideas for applying existing epidemiological methods to applications in public health and the epidemiological sciences.
4. Develop written and oral reports to communicate effectively with research investigators the pivotal aspects of a study, including: design, study objectives, data analysis methodology, results, and conclusions.
5. Create a collaborative environment for working on written and oral reports.
6. Employ basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiological measures.

Epidemiology Student Learning Outcomes

1. Demonstrate their readiness to work with communities to address public health problems.

2. Select and apply theoretically based interventions to address public health problems.
3. Apply appropriate research methods to address community health problems, particularly among rural and underserved populations.
4. Construct a public health and epidemiological research question from ideas, conditions, and events that exist in a rural and urban community, region, state, and nation using critical thinking skills.
5. Demonstrate required skills for translating public health practice objectives to the appropriate epidemiological framework for analysis and interpretation of results.
6. Select appropriate statistical tools, methodological alternatives, and graphical descriptives to analyze and summarize public health and epidemiological data.
7. Formulate population-based hypotheses and develop appropriate research designs to test these hypotheses.
8. Communicate epidemiological principles and concepts to lay and professional audiences through both oral and written communication.

CEPH DrPH Competencies

Data & Analysis

1. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels
2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue
3. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health

Leadership, Management & Governance

4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners
5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies
6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems
7. Create a strategic plan
8. Facilitate shared decision making through negotiation and consensus-building methods
9. Create organizational change strategies
10. Propose strategies to promote inclusion and equity within public health programs, policies and systems

11. Assess one's own strengths and weaknesses in leadership capacities including cultural proficiency
12. Propose human, fiscal and other resources to achieve a strategic goal
13. Cultivate new resources and revenue streams to achieve a strategic goal

Policy & Programs

14. Design a system-level intervention to address a public health issue
15. Integrate knowledge of cultural values and practices in the design of public health policies and programs
16. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis
17. Propose interprofessional team approaches to improving public health

Education & Workforce Development

18. Assess an audience's knowledge and learning needs
19. Deliver training or educational experiences that promote learning in academic, organizational or community settings
20. Use best practice modalities in pedagogical practices

Performance-Based Objectives Linked to Course Activities (Note: Assessment Activities Described in Next Section)

1. Students will get a basic understanding of the public health importance of folate, folic acids supplements, and folate fortification. (Activity 1, 2).
2. Students will be able to appreciate the controversies surrounding the folate-related public health interventions, including its effectiveness in improving the outcomes of pregnancy and potential harms to the population at excessively high exposure. (Activity 1, 2).
3. Student will be further reinforced their skills in design a public health and epidemiological investigation, data to be collected that reflect the research objectives, and specification of appropriate methods of analysis to address the folate-related research questions identified by themselves (Activity 2, 3).
4. Student will be further trained in analyze folate-related epidemiological data with appropriate statistical software and epidemiological methods (Activity 3, 4).
5. Develop written and oral reports to communicate effectively with research investigators the major conclusions about folate, its implication on policy development and clinical practices (Activity 4,5)

Assessment of Student Learning

1. Activity 1: Reading effectively the documents recommended by the instructors to get a basic understanding of the public health importance of folate, folic acids supplements, and folate fortification and appreciate the controversies surrounding the folate-related

public health interventions, including its effectiveness in improving the outcomes of pregnancy and potential harms to the population at excessively high exposure. Effectiveness of learning will be evaluated using the mini-review, research proposal and final publishable project submission.

2. Activity 2: Searching extensively the existing literature to identify the most urgent research questions. This will be evaluated using the written submission of the minireview (assignment 1), which requires students to summarize the epidemiology of selected risk factor/disease from the biggest developing country - China.
3. Activity 3: Designing appropriately a secondary data analysis project to address the questions identified in the Activity 1 and 2. This will be evaluated using the written submission of the research proposal, which requires students to summarize the epidemiology of folate-relevant risk factor/diseases and take the availability of the variables from the existing public accessible database for a realistically workable research project.
4. Activity 4: Selecting promptly appropriate statistical procedures of commonly used computer software to analyze, describe, and summarize the outcomes of folate-related epidemiological data.
5. Activity 5: Presenting effectively the outcome and conclusion from the analyses in written communication or oral presentation to the professional audience or lay. It will be evaluated using the Preparation and delivery of a PowerPoint presentation and a publishable manuscript.

Overview of the content to be covered the semester:

Week	Topic assignment (Milestones or deliverable items of the project)	Reading, data, and other relevant resources
1 08/14	Student and instructor work together to develop a mutually acceptable study plan	Students are expected to explore the topic by them self.
2 08/21	Finalize the study plan (syllabus)	Students are expected to explore the topic by them self.
3 08/28	Folate and folate fortification	“Contemporary Issues Surrounding Folic Acid Fortification” - Initiatives” Prev. Nutr. Food Sci. 2014;19(4):247-260“Is folic acid good for everyone”, Am J Clin Nutr-2008-Smith-517-33 “Vitamin paradox in obesity: Deficiency or excess?” World J Diabetes. 2015 Aug 25;6(10):1158-67.
4 09/04	Controversies surrounding folic acid supplementation/fortification	“ In vitamin B12 deficiency, higher serum folate...” Proc Natl Acad Sci U S A. 2007 Dec 11;104(50):19995-20000. Epub 2007 Dec 4

5 09/11	Folate, Cancer, CVD and other major chronic diseases	Int J Cardiol. 2016 Sep 15;219:136-42. doi: 10.1016/j.ijcard.2016.06.024. JAMA. 2015;313(13):1325-1335 Cancer Epidemiol Biomarkers Prev 2009;18(5). May 2009 “Intake and Biomarkers of Folate and Risk of Cancer Morbidity...” Medicare Linkage. PLoS ONE 11(2): e0148697.
6 09/18	Studied published by Dr. Zhang’s group	Nutr Metab Cardiovasc Dis. 2015 Nov;25(11):997-1006 Nutr Metab Cardiovasc Dis. 2018 May 30. pii: S0939-4753(18)30164-9
7 09/25	Develop your own study proposals (Turn in the study proposal, including literature review)	A rubric will be provided on the shared driver.
8 10/02	Get the data from Dr. Zhang’s research assistant	The data and its variable explanation will be available on the shared driver.
9 10/09	Analyzing data	
10 10/16	Analyzing data	
11 10/23	Analyzing data	
12 10/30	(Turn in Outline of your report in the format of Power-point)	Lecture notes from the instructors
13 11/06	How to develop a publishable manuscripts?	Lecture notes from the instructors
14 11/13	Turn in the 1st draft of your manuscript	Lecture notes from the instructors
BREAK		
16 11/27	Project presentation (Turn in Power-point presentation)	A rubric will be provided on the shared driver.
17 12/04	(Turn in publishable manuscript)	A rubric will be provided on the shared driver.

Portfolio Inclusion

Samples of your work may be reproduced for search purposes and/or inclusion in the professor’s teaching portfolio. You have the right to review anything selected for use, and subsequently ask for its removal.

Instructional Methods

This is a directly independent study, therefore, the learners are supposed to do most of the work independent under the supervision of the instructor. It’s expected that the students are going to meet professor on weekly based and report the progress to the professor.

Grading:

Component / deliverable items	Due time (week)	% of grade *
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Literature search (table)	7	10
Literature review (Project mini-review as parts of the study proposal)	7	10
Project outline in Power-point format *	12	10
Project presentation	14	10
Final of class project (In the format of publishable manuscript, rubric would be available) <ul style="list-style-type: none"> • Importance (10 points) • Methodology (10 points) • Results (10 points) • Lessons learned/ policy develop or clinical practice implications (10 points) • Clarity (5 points) • Abstract (5 points) 	16	50
Class participation, □ Students are expected to meet the instructor weekly		10

*: Including background (importance of the study), study design, study population, data source, variable definition, analytic method, results, strengthens, limitation, and implication of policy development and clinical practice if applicable.

90 – 100	A	80 – 89	B	70 – 79	C
60 – 69	D	Below 60	F		

General Expectations

1. For every one-credit hour, you should expect to work roughly two hours outside the classroom each week. For example, for a three credit hour course, during a regular fifteen week semester, you should expect approximately ninety hours of work outside of class.
2. Students are expected to keep up with the class, to read the required material, and to submit assignments and activities by due dates and times.
3. Students are expected to independently complete all activities, exercises, assignments, and assessments including exams.
4. Students are expected to produce quality work. Typos and grammar errors should be kept to a minimum. The format and readability of submissions will be taken into consideration when assigning a grade.
5. Remember to check when assignments are due. It is recommended that you stay ahead of schedule on the assignments, so if an emergency happens, your assignment will be completed and ready to submit within the designated time frame. It is your responsibility to keep track of the due dates for each assignment.

Response Times

During a normal work week (i.e., Monday 9:00 AM through Friday 5:00 PM) students can expect responses as follows:

- Email: within 48 hours
- Discussion posts: within 72 hours
- Assignment grades: within 72 hours of submission date.

Exceptions: I may not check FOLIO or GSU email over the weekends. If you send me an email after 5:00 PM on Friday, please do not expect a response until the following Monday.

All assignments will be graded promptly so that students may accurately calculate their grades at any point in time during the semester. There are times when extraordinary circumstances occur (e.g., serious illness, death in the family, etc.). In such circumstances, and/or if you need additional time to satisfactorily complete any course requirement, please consult with the instructor within a reasonable amount of time. Extensions are not guaranteed and will be granted solely at the discretion of the instructor.

Class Attendance and Participation Policy

Federal regulations require attendance be verified prior to distribution of financial aid allotments. Regular attendance is expected. However, as a directly independent study, your attendance will be verified at the first regular class session as in other classes. Your class attendance and participation would be evaluated based on weekly meeting with your instructor. Therefore, please proactively approach your professor to make weekly appointment to ensure the progresses you are going to make are closely monitored by your instructors.

It is the policy of the University to permit students, faculty, and staff to observe those holidays set aside by their chosen religious faith. The faculty should be sensitive to the observance of these holidays so that students who choose to observe these holidays are not seriously disadvantaged. It is the responsibility of those who wish to be absent to make arrangements in advance with their instructors.

Students participating in authorized activities as an official representative of the University (i.e., athletic events, delegate to regional or national meetings or conferences, participation in university-sponsored performances, and **JPHCOPH funded**) will not receive academic penalties and, in consultation with the instructor of record, will be given reasonable opportunities to complete assignments and exams or given compensatory assignment(s) if needed. The student must provide written confirmation from a faculty or staff advisor to the course instructor(s) at least 10 days prior to the date for which the student will be absent from the class. The student is responsible for all material presented in class and for all announcements and assignments. When possible, students are expected to complete these assignments before their absences. In the event

of a disagreement regarding this policy, an appeal may be made by either the student or the instructor of record to the corresponding college dean. (*University Graduate Catalog*)

Academic Misconduct

As a student registered at this University, it is expected that you will adhere to only the strictest standards of conduct. It is recommended that you review the latest edition of the *Student Conduct Code* book, as well as the latest *Undergraduate & Graduate Catalog* to familiarize yourself with the University's policies in this regard. Your continued enrollment in this course is an implied contract between you and the instructor on this issue; from this point forward, it is assumed that you will conduct yourself appropriately.

Plagiarism:

According to the Academic Dishonesty Policy of Georgia Southern University, Plagiarism includes (but is not limited to):

- A. Directly quoting the words of others without using quotation marks or indented format to identify them.
- B. Using published or unpublished sources of information without identifying them.
- C. Paraphrasing material or ideas without identifying the source.
- D. Unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic material.

If you are accused of plagiarism by a JPHCOPH, the following policy, as per the Judicial Affairs website: (<http://students.georgiasouthern.edu/judicial/faculty.htm>) will be enforced:

PROCEDURES FOR ADJUDICATING ACADEMIC DISHONESTY CASES

First Offense - In Violation Plea

1. If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is a first violation of academic dishonesty. The incident will be reported via the following website: <http://students.georgiasouthern.edu/judicial/faculty.htm>
2. If it is a first violation, the professor should talk with the student about the violation. **If the student accepts responsibility in writing and the professor decides to adjudicate the case, the following procedures will be followed:**
 - a. The student will be placed on disciplinary probation for a minimum of one semester by the Office of Judicial Affairs.
 - b. The student will be subject to any academic sanctions imposed by the professor (from receiving a 0 on the assignment to receiving a failing grade in the class).
 - c. A copy of all the material involved in the case (Academic Dishonesty Report Form and the Request for Instructor to Adjudicate Form) and a brief statement from the professor concerning the facts of the case and the course syllabus should be mailed to the Office of Judicial Affairs for inclusion in the student's discipline record.

First Offense - Not in Violation Plea (student does not admit the violation)

If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is the first or second violation of academic dishonesty. The student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case. If the student is found responsible, the following penalty will normally be imposed:

- a. The student will be placed on Disciplinary Probation for a minimum of one semester by the Office of Judicial Affairs.
- b. The student will be subject to any academic sanctions imposed by the professor.

Second Violation of Academic Dishonesty

If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, and if it is determined this is the second violation, the student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case.

If the student is found responsible, the following penalty will normally be imposed:

- a. Suspension for a minimum of one semester or expulsion.
- b. The student will be subject to any academic sanctions imposed by the professor.

NOT RESPONSIBLE FINDING

When a student is found not responsible of academic dishonesty, the work in question (assignment, paper, test, etc.) would be forwarded to the Department Chair. It is the responsibility of the Chair to ensure that the work is evaluated by a faculty member other than the individual who brought the charge and, if necessary, submit a final grade to the Registrar. For the protection of the faculty member and the student, the work in question should not be referred back to the faculty member who charged the student with academic dishonesty. In the case of a Department Chair bringing charges against a student, an administrator at the Dean's level will ensure that the student's work is evaluated in an appropriate manner.

CONFIDENTIALITY

In accordance with provisions of the Family Educational Rights and Privacy Act of 1974 and the Georgia Open Records Act, any information related to a violation of academic dishonesty or the outcome of a judicial hearing regarding academic dishonesty, is prohibited and must be treated as confidential by members of the faculty."

Disability-related Accommodations

Georgia Southern University is committed to providing reasonable accommodations to students with documented disabilities as required under federal law. Disabilities may include ADD or AD/HD, autism spectrum disorder, brain injury, chronic medical conditions, communication disorders, hearing loss, learning disabilities, mobility impairment, psychological disorders, visual impairment or temporary injuries. The purpose of disability accommodation is to provide equal access to the academic material and equal access to demonstrate mastery of the material. If you have a disability and need accommodations, please contact the Student Accessibility Resource Center (SARC). You will need to meet with a SARC staff member who can help you gather

documentation of your disability or refer you to an appropriate resource for assessment. Once documentation of the disability is approved, SARC staff will provide you with an accommodation letter detailing the approved accommodations which you should present to me so we can discuss and implement your accommodations. Disability accommodations work best starting at the beginning of the semester, but can be approved and started at any point in the semester. Accommodations start at the time the accommodation letter is presented to faculty within reasonable timelines; accommodations are not given retroactively. SARC on the Statesboro campus is located on the second floor of Cone Hall and the phone number is (912) 478-1566. SARC for Savannah and Liberty campuses is located on the second floor of Memorial College Center and the phone number is (912) 344-2572.

University Calendar for the Semester

The University Calendar is located with the semester schedule, and can be found at:
<http://em.georgiasouthern.edu/registrar/resources/calendars/>

One Final Note

The contents of this syllabus are as complete and accurate as possible. The instructor reserves the right to make any changes necessary to the syllabus and course material to ensure better student learning. The instructor will announce any such changes in class. It is the responsibility of the student to know what changes have been made in order to successfully complete the requirements of the course.

This syllabus, my lecture notes, and all materials distributed and presented during this course are protected by copyright law. You are authorized to take notes in this class but that authorization extends to only making one set of notes for your personal use and no other use. You are not authorized to sell, license, commercially publish, distribute, transmit, display, or record notes from this class unless you have my written consent to do so.

STUDENT CONDUCT CODE

The Student Conduct Code is the official University publication governing student conduct and behavior. It is the responsibility of each student to become familiar with the rules and regulations governing student life. Student conduct procedures, appeal procedures, and disciplinary sanctions are found in the Student Conduct Code at <http://students.georgiasouthern.edu/conduct>. I acknowledge that I have read and understand this statement referencing the Student Conduct Code.

ACADEMIC DISHONESTY

The University goal is to foster an intellectual atmosphere that produces educated, literate people. Because cheating and plagiarism are at odds with that goal, they shall not be tolerated in any form. Students are expected to adhere to the rules and regulations as set forth in the Student Conduct Code. Therefore, all work submitted by a student must represent that student's own ideas and effort; when the work does not, the student has engaged in academic dishonesty. Plagiarism occurs when a person passes in another person's work as his or her own, borrows directly from another person's work without proper documentation, and resubmits his or her own work that has been previously submitted without explicit approval from the instructor. For

example, academic dishonesty occurs whenever a student participates in any of the following: Cheating submitting material that is not yours as part of your course performance; using information or devices that are not allowed by the faculty; obtaining and/or using unauthorized materials; fabricating information, research, and/or results; violating procedures prescribed to protect the integrity of an assignment, test, or other evaluation; collaborating with others on assignments without the faculty's consent; cooperating with and/or helping another student to cheat; demonstrating any other forms of dishonest behavior. Plagiarism directly quoting the words of others without using quotation marks or indented format to identify them; using sources of information (published or unpublished) without identifying them; paraphrasing materials or ideas without identifying the source; self-plagiarism - resubmitting work previously submitted without explicit approval from the instructor; unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic material. NOTICE: The list above is intended only to provide general guidelines for recognizing and avoiding common types of academic dishonesty. It is in no way an exhaustive or comprehensive list of all the types of academic dishonesty. For more information about academic honesty, see the Student Conduct Code at <http://students.georgiasouthern.edu/conduct>. I acknowledge that I have read and understand the Academic Dishonesty Policy.

I have read the syllabus and understand the contents and course requirements.

Student Name (print)

Student Signature

Date