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PUBH 7132 – Scientific Basis of Public Health

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Georgia Southern University
Jiann-Ping Hsu College of Public Health
PUBH 7132 – Scientific Basis of Public Health
Fall 2018

Instructor: Dr. Haresh Rochani

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Graduate Assistant: Kapil Rathi (kr05404@georgiasouthern.edu)

Graduate Assistant Office Hours: Thursday 9:30 am to 11 am and 12:30- 1 pm (Room 1004)

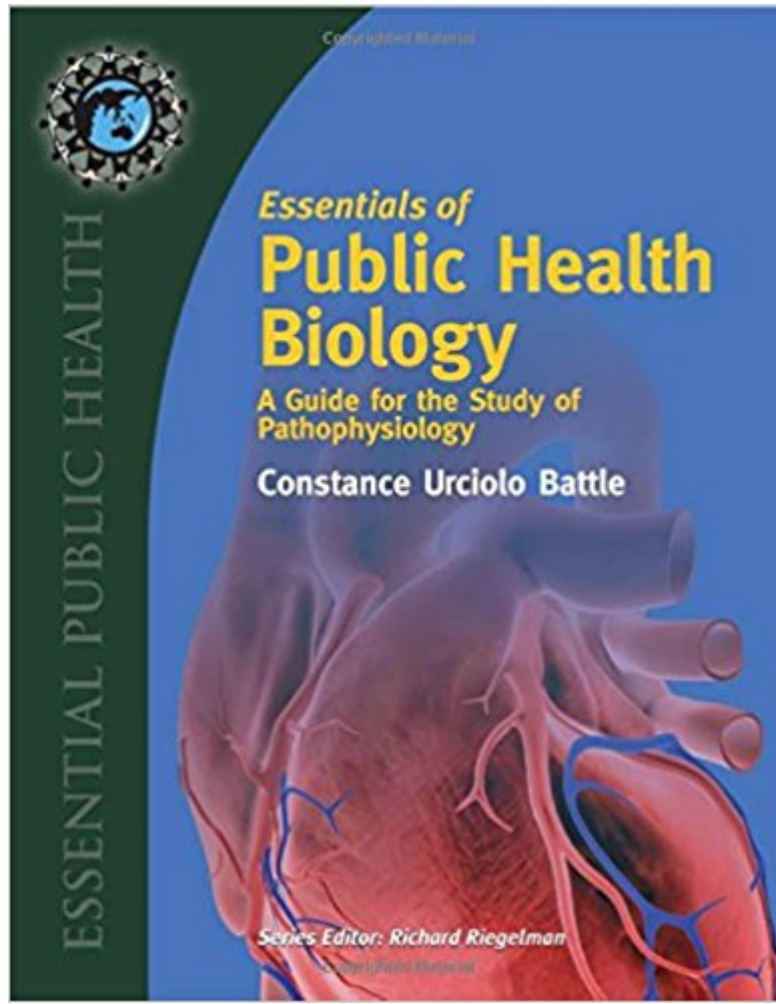
Face to face meetings: 8/31/18, 9/28/18, 10/26/18 and 11/30/18 from 9:00 to 11:45 am in
Nursing/Chemistry Bldg. 1008

Office Hours: Monday: 10am - 1 pm & Wednesday: 10 am to 11 am. Or by appointment or by Skype
(id: harry2467)

Prerequisites: None

Catalog Description: This course explores the scientific basis of 21st century disease processes including a survey of the origins, natural history, factors influencing individual and community risk. Clinical symptoms of diseases impacting humans, both acute and chronic, as well as epidemiologic trends will be also be discussed. Students will obtain an understanding of scientific mechanisms associated with the disease processes with particular focus on using this information in health-related professions and public health decision-making. As such, emphasis will be placed on the understanding and application of proposing community-based solutions designed to break the cycle of disease.

Required Textbook: Battle C.U. (2017). *Essentials of Public Health Biology: A guide for the study of Pathophysiology*. Jones & Bartlett Learning.



Cross-cutting Competencies

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, inter-professional, and cross-sectional 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.

Performance-Based Objectives:

At the completion of this course, the student will be able to:

1. Specify the role of the immune system in population health.
2. Describe how behavior alters human biology.
3. Identify the ethical, social and legal issues implied by public health biology.
4. Explain the biological and molecular basis of public health.
5. Explain the role of biology in the ecological model of population-based health.
6. Explain how genetics and genomics affect disease processes and public health policy and practice.
7. Articulate how biological, chemical and physical agents affect human health.
8. Apply biological principles to development and implementation of disease prevention, control, or management programs.
9. Apply evidence-based biological and molecular concepts to inform public health laws, policies, and regulations.
10. Integrate general biological and molecular concepts into public health.

Instructional Methods:

This course is a blended course in which almost all the instructions will be delivered online. We will meet on the following days to discuss selected topics for this course: Fridays 05/18/18, 06/01/18, 06/15/18 and 06/29/18 from 9:00 to 12 pm in Education Bldg. Room 1125. Class meetings will be a combination of lecture, class discussion and active participation. PowerPoint presentations (you can find and download from Folio) will be used in the lecture portion of this course. Prior to each lecture, the student is encouraged to complete the recommended reading and actively participate in the class discussion. In this way, it is hoped that the learner will be better prepared to successfully accomplish the learning objective of each lecture experience.

Course Outline:-

Weeks	Readings	Assignments	Due Dates
Week 1	Chapter 1	<ul style="list-style-type: none">Introduce yourself	8/17/2018
Week 2	Chapter 2 & 3	<ul style="list-style-type: none">M2 Discussion	8/22/2018
Week 3	Chapter 4 & 5	<ul style="list-style-type: none">Quiz 1	8/29/2018 In class meeting on 8/31/2018
Week 4	Chapter 6 & 7	<ul style="list-style-type: none">M4 Discussion	9/5/2018
Week 5	Chapter 8 & 9	<ul style="list-style-type: none">Quiz 2	9/12/2018
Week 6	Chapter 10 & 11	<ul style="list-style-type: none">M6 Discussion	9/19/2018
Week 7	Chapter 12 & 13	<ul style="list-style-type: none">Quiz 3	9/26/2018 In class meeting on 9/28/2018
Week 8	Chapter 14 & 15	<ul style="list-style-type: none">M8 Discussion	10/3/2018
Week 9			
Week 10	Mid-Term Exam		10/17/2018
Week 11	Chapter 16 & 17	<ul style="list-style-type: none">Quiz 4	10/24/2018 In class meeting on 10/26/2018
Week 12	Chapter 18 & 19	<ul style="list-style-type: none">M11 Discussion	10/31/2018
Week 13	Chapter 20 & 22	<ul style="list-style-type: none">Quiz 5	11/07/2018

Week 14	Chapter 23,24 & 25	<ul style="list-style-type: none"> • M13 Discussion • Presentation 	11/14/2018
Week 15	Thanksgiving Break		
Week 16		Respond to presentations	11/28/2018 In class meeting on 11/30/2018
Week 17	Final Exams		12/05/2018

Topics covered in Quizzes:

Quizzes	Chapters covered
Quiz 1	Chapters 1,2,3,4,5
Quiz 2	Chapter 6,7,8,9
Quiz 3	Chapter 10,11,12,13
Quiz 4	Chapter 16,17

Methods of Evaluation and Grading:

Item	Weight
Quizzes	30%
Discussions	10%
Mid-term Exam	20%
Group Presentations	10%
Final Exam	30%
Total	100%

Mid-term Exam is due on 10/17/2018

Final Examination is due on Monday, 12/05/2018

The following point scale will be utilized in grading:

[90%-100%] A

[80%-90%) B

[70%-80%) C

[60%-70%) D

[0%-60%) F

Your grades **will** be posted in folio. All exams and assignments will be graded and returned promptly (within 1 weeks) 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. ***Nota Bene:*** Extensions are not guaranteed and will be granted solely at the discretion of the instructor.

IMPORTANT: For all exams and any hand-written assignments, please make certain that your hand-writing is legible.

Late Homework Assignment:

Some of the homework assignments require substantial work in advance of the actual due date. It is therefore important that you read the syllabus carefully, look at all homework assignments at the beginning of the course, and set your own deadlines for when you will accomplish the work. Pay special attention to the right hand column of the Course Schedule which lists due date. Late work may submitted for documentation, however, no points will be awarded. All work is expected to be turned in on time.

Expectations/Class Participation:

For this Hybrid class, you should expect to spend 10-15 hours each week on coursework. Logging in at least three times a week is minimally necessary to be productive and to interact with your peers. Keeping up with the weekly assignments and work and submitting them on time is necessary. My role will be one of facilitator for this interaction, so I will not be responding to every comment. However, I will be looking in frequently during the week. Discussion posts will be graded primarily for quality and timeliness. Quality in the discussions is determined by your interpreting material, designing methods and approaches appropriate to Public Health, and making appropriate judgments for a Health professional; merely agreeing with or repeating material in your discussions is not quality. Timeliness involves posting early and posting often. **You will not be able to see other student's discussions until you post yours.** Posting to the discussion forums at the last hour of the deadline does not give your classmates ample time to respond. The more effort exerted by all to complete readings, meet the due dates and participate in and contribute to the online discussions, the more meaningful and dynamic the learning experience for all. Success requires reading and doing external research more widely than the textbook. Thus, to be successful, one should work each week on that week's

assignments, read, evaluate and use external resources and also keep contributing to and reading the discussions about each assignment.

Student Responsibility: Distance learning requires more individual discipline than traditional classes, and requires that you have at least some control over your time and schedule. It is not easier or less time than face-to-face courses.

Discussion responses should be timely to be considered in your grade. **You have to respond at least two of your colleague student's discussions. In addition you have to respond all the student group presentations submitted in folio.**

Student Group Presentations Guidelines:

Students will be required to research a disease or health condition and present a comprehensive presentation to the class. Students will self-select or be assigned to work in small groups. The group size will be set on the first day of face to face class and finalized in the second face to face meeting.

The goals of this assignment are to develop a comprehensive overview of a specific disease condition, addressing both the biologic basis as well as public health aspects and implications of the condition. This activity provides an opportunity to sharpen skills to identify information sources; to develop skills to present this important material to lay audiences; and to work as a group on a project.

After identifying its members, the student group will be randomly assigned **one of the listed topics by instructor**. One student member of the group is required to prepare a formal presentation in power point format and upload it to the folio. **One member of the group is also required to submit half to one page summary of contribution for this particular assignment by each student in particular group.**

In the preparation of their presentations, students may wish to use the required and recommended texts, other library and computer-based/internet resources, voluntary, professional, and governmental associations, organizations, and agencies, such as the National Institutes of Health, Centers for Disease Control and Prevention, World Health Organization (WHO), Health Resources and Services Administration, National Center for Health Statistics, the American Diabetes Association, the American Academy of Pediatrics, American College of Physicians/American Society of Internal Medicine.

University Writing Center: For those of you who may need assistance with improving your writing for assignments, the data analysis project, or for general writing, I encourage you to visit the University Writing Center. To learn more, visit their website:
<http://class.georgiasouthern.edu/writingc/>.

Academic Integrity: Students are expected to follow guidelines outlined in the *Academic Dishonesty* policy found online in the course catalog. Any student found in

violation of academic honesty will receive a grade of 'F' for the course. It is the student's responsibility to familiarize him/herself with the student policies and expectations set forth in the online *GSU Catalog*.

Plagiarism: According to the Academic Dishonesty Policy of GSU, 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/conduct/resources/faculty/academic-dishonesty/>) 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/conduct/resources/faculty/academic-dishonesty/>
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).

1. 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 students 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:

1. 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 Department 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 Deans level will ensure that the students work is evaluated in an appropriate manner.

Attendance Policy & Class Participation: Federal regulations require attendance be verified prior to distribution of financial aid allotments. So attendance of all classes is required.

Disclaimer: 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. The instructor will make every effort to inform you of changes as they occur. It is the responsibility of the student to know what changes have been made in order to successfully complete the requirements of the course