Course title: Perspectives in Global Health
Academic semester: Spring 2018
Course number: PHBA 423-61
Credits: 3
Prerequisites: PHBM 434, 435, 436, 437
(Current standing in the PY3 year)
Time and location: Wednesdays, 3:00-5:40pm in Bayer 102

Course faculty: Jordan R. Covvey, PharmD, PhD, BCPS (course master)
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Office hours: By appointment; please arrange by email
Course description:

This course seeks to provide a global view and understanding of healthcare/science and the role of the pharmacist within the world. Course material would build upon basic principles introduced in PHBA 311 (Public Health and Epidemiology) and expand upon this through discussion of major global health challenges and the intersection of health with other global issues such as immigration/migration, ethics, cultural competency, poverty, violence, science and the business market for pharmaceuticals. Students will learn about the organizational infrastructure of global health (i.e. the World Health Organization) and health system strategies outside of the USA. Pertinent current issues relating to global health will be examined as appropriate.

Required resources:

Readings will be assigned by the instructor using Blackboard (Bb). Class activities may require the use of electronic resources, and therefore a laptop, tablet or e-reader with access to campus Wi-Fi is recommended.

Educational technology requirements:

Bb will be utilized to communicate course materials as needed.

Class attendance/participation:

Attendance and participation (including in-class discussions and exercises as well as pre-class preparation) is expected for this course and will contribute to the overall participation score. Failure to contribute in this manner will result in reduction in participation/attendance points. Students should notify the course coordinator prior to class time in the event of an emergency that would prevent them from attending class. If a student is absent from class due to an extenuating circumstance, the course coordinator reserves the right to offer a ‘make-up’ activity for the missed session.

In-class behavior:

As students in the professional program, you are expected to exhibit professional behavior at all times and the instructor endeavors to foster an environment of mutual respect and professionalism in the classroom. Disruptive behavior (loud or continuous talking, text messaging, use of cell phones, or other disruptive behaviors) will not be tolerated during class. Students are expected to be active in discussions while respecting the opinions of fellow classmates.

Class trip and outside partners:

In order to give students further perspective on global health activities, outside visits to relevant organizations or events in the Pittsburgh area may be scheduled during the semester (in red), potentially outside of usual class time. Prior notice will be given for time, date and location and attendance is required barring other academic conflicts. Some class time will be adjusted to account for the extra time spent off-site.

- Global Links: 700 Trumbull Drive, Pittsburgh, PA 15205 (map here)
Learning outcomes and assessment strategy:

Upon successful completion of all course components, including topic discussions, readings, and completing all required projects/assignments, the student will be able to:

1. Demonstrate a comprehensive understanding of global health issues pertinent to pharmacy and pharmaceutical science in the past, present and future
2. Develop an enhanced awareness and ability to work with patients, healthcare and science within a widened world view

Assignments/projects:

- **Assignment #1 (Case study in ethics/culture):** Students will be individually provided two of eight patient-oriented case studies regarding ethical/cultural topics in global health. The essay will be a required 2-3 pages, due **February 21, 2018 at 11:59pm**. The essay should discuss:
  - The cultural/ethical issues at hand in the described scenarios
  - Different approaches to dealing with the scenarios
  - Final recommendations on what you would do

- **Project #1 (Intervention/education project):** Students will work in small groups longitudinally over the semester to develop a patient-oriented educational or interventional project to be implemented in Haiti. Topics will be selected on the first day of class from the following list: **hygiene, maternal health, cholera, malaria, mental health, nutrition/malnutrition, chronic disease**. The project grade will result from several deadlines over the course of the semester, including:
  - Background (20%): due **January 31, 2018 at 11:59pm**
    - The first interim due date will require students to submit a background needs assessment regarding key information about Haiti, including (1) health statistics, (2) discussion of the healthcare system and (3) opportunities for education/intervention in your chosen topic area
  - Grant development (20%): due in class **February 14, 2018**
    - The second interim due date will have students come to class with three identified potential funding mechanisms for their project via organizations, foundations or other funding streams. The class will include a workshopping session to begin development of the proposal.
  - Activity planning (20%): due **March 14, 2018 at 11:59pm**
    - The third interim due date will have students submit their revised background/grant development and a complete description of their activity, including (1) methods of their plan, (2) resources needed, (3) measurement of outcomes.
  - Completed project (40%): due **April 11, 2018 at 11:59pm**
    - The final due date will incorporate feedback throughout semester.

- **Assignment #2 (Eradication plan):** Students will work in small groups to design an eradication plan for a neglected tropical disease. Microorganisms/disease states will be assigned in class on February 6, 2017. Students will be asked to identify potential points of intervention as well as significant barriers to eradication. Each group will submit a two-page proposal by **April 4, 2018 at 11:59pm**.
• **Project #2 (Country discovery):** Students will individually choose a country and will be asked to discuss and present a specific international health issue related to that country. Countries will be selected on the first day of class from the following list: *Cuba, Ghana, Tanzania, India, Guyana, China, Brazil, Syria, Iran.* The presentation should tie together the multiple topic areas covered by the course, including epidemiology of the health issue, healthcare structure of the country, culture/ethical issues to consider, potential drug utilization/development and role of organizational support for the issue. The project grade will result from two deadlines over the course of the semester, including:

  o Submitted presentation draft (30%): **due March 21, 2018 at 11:59pm.**
    ▪ The interim due date will require a complete draft of their presentation for feedback from faculty members prior to presentation in class.
  o Presentation in class (50% by faculty/20% by peers): **on April 18/25, 2018.**
    ▪ The final presentation should be 10-15 min long with approximately 5 minutes for questions from faculty/fellow students

**Grading policy:**

The final course grade will consist of marks from 2 written assignments, 2 projects and participation in discussions/mini-assignments made during class time, for a total of 500 points. Activities that require group work will be marked with all group members receiving the same grade, emphasizing the importance of teamwork in these projects.

- Participation in class activities 100 pts
- Assignment #1 (Case study in ethics/culture) 100 pts
- Assignment #2 (Eradication plan) 100 pts
- Project #1 (Intervention/education) 100 pts
- Project #2 (Country discovery) 100 pts
- Total 500 pts

Grades will be issued according to the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>89.5 – 100%</td>
<td>448 – 500 pts</td>
</tr>
<tr>
<td>A-</td>
<td>87.5 – 89.4%</td>
<td>438 – 447 pts</td>
</tr>
<tr>
<td>B+</td>
<td>85.5 – 87.4%</td>
<td>428 – 437 pts</td>
</tr>
<tr>
<td>B</td>
<td>79.5 – 85.4%</td>
<td>398 – 427 pts</td>
</tr>
<tr>
<td>B-</td>
<td>77.5 – 79.4%</td>
<td>388 – 397 pts</td>
</tr>
<tr>
<td>C+</td>
<td>75.5 – 76.4%</td>
<td>378 – 387 pts</td>
</tr>
<tr>
<td>C</td>
<td>69.5 – 75.4%</td>
<td>348 – 377 pts</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 69.5%</td>
<td>&lt; 348 pts</td>
</tr>
</tbody>
</table>
Course topics/schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 10</td>
<td>Introduction to global health and course</td>
<td>Covvey</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tidgewell</td>
</tr>
<tr>
<td>2</td>
<td>January 17</td>
<td>Drug discovery for global health</td>
<td>Tidgewell</td>
</tr>
<tr>
<td>3</td>
<td>January 24</td>
<td>International collaborations in drug discovery</td>
<td>Tidgewell</td>
</tr>
</tbody>
</table>
| 4    | January 31 | Cultural influences on health
**Project #1 background due** | Covvey        |
| 5    | February 7 | Poverty and aid                            | Covvey        |
| 6    | February 14| Grant development opportunities
**Project #1 funding research due** | Covvey        |
|      |            |                                            | Tidgewell     |
| 7    | February 21| *No class due to Global Links visit*
Assignment #1 due |              |
|      |            | Thurs, February 22
Visit to Global Links (6:00-8:00pm) | Course faculty|
| 8    | February 28| Global infectious disease                   | Guarascio     |
| 9    | March 7    | *Spring break (no class)*                  |              |
| 10   | March 14   | Neglected tropical diseases
**Project #1 activity planning due** | O'Donnell     |
| 11   | March 21   | Current events in infectious disease
**Project #2 draft due** | Guarascio     |
|      |            |                                            | O'Donnell     |
| 12   | March 28   | *Classes meet according to Monday schedule (no class)* |              |
| 13   | April 4    | Global health experience panel (TBD)
**Assignment #2 due** | External     |
|      |            |                                            | speakers      |
| 14   | April 11   | Student choice session (TBD) *
**Project #1 final due** | Course faculty|
| 15   | April 18   | **Project #2 county discovery presentations** | Course faculty|
| 16   | April 25   | **Project #2 county discovery presentations** | Course faculty|

*At the beginning of the semester, the class will agree on a topic of their choosing related to global health for the instructors to create a class session.*
Course domains, competencies and learning outcomes:

In accordance with the Mylan School of Pharmacy Approved List of Domains, Competencies, and Learning Outcomes, the following outcomes are addressed throughout the course:

**Domain 1 – Foundational Knowledge**
- 1.1. Learner (Learner) - Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient centered care.

**Domain 2 – Essentials for Practice and Care**
- 2.3. Health and wellness (Promoter) - Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.

**Domain 3 - Approach to Practice and Care**
- 3.1. Problem Solving (Problem Solver) – Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.
- 3.2. Educator (Educator) – Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.
- 3.3. Patient Advocacy (Advocate) - Assure that patients’ best interests are represented.
- 3.5. Cultural sensitivity (Includer) - Recognize social determinants of health to diminish disparities and inequities in access to quality care.
- 3.6. Communication (Communicator) – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

**Domain 4 – Personal and Professional Development**
- 4.1. Self-awareness (Self-aware) – Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.
- 4.4. Professionalism (Professional) - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

Course objectives:

Upon successful completion of all course components, including topic discussions, readings, and completing all required projects/assignments, the student will be able to:

- Build upon public health principles learned in PHBA 311 (Public Health and Epidemiology) to identify and discuss global burden of disease
- Discuss the implications of immigration and movement around the globe upon healthcare infrastructure and delivery
- Identify and describe current priorities in health affecting the world and how these are applicable to practice in the USA
- Describe past and present epidemics and strategies created to protect against the future
- Compare/contrast infrastructures of various healthcare systems and discuss the pros/cons associated with each
• Discuss the place of ethics and cultural competency in global health and its importance to daily pharmacy practice
• Identify regulations and respect for autonomy and ownership of biodiversity of different countries and peoples.
• Describe drug discovery for neglected diseases with a focus on compounds found and aspects of key chemistry

Policy for late/missed assignments:

No credit will be given for late or missed assignments; please refer to due dates described in this syllabus. The only exception to this rule will be for ‘excused absences’ which may be obtained with authorization from the course master prior to the missed session in question, or through Student Services for other circumstances (illness, emergency, etc.).

Policy and procedure for return/review of assignments:

After an assignment grade has been issued, students have 72 hours to contact the course master to set up a mutually agreeable time to review the assignment and the grade issues. The course master will provide feedback on the assignment as requested.

Administrative policies governing all courses:

Students are required to review these policies in their entirety. Complete copies of or links to the policies may be found on the Student Services Bb site, Policy and Procedures.

• Exam Tardiness Policy
• Missed Exams Policy
• Grade Appeal Policy
• Academic Integrity Policy
• Services for Students with Disabilities
• Audio/Visual Taping Policy