HSC 4608L: CRITICAL THINKING IN HEALTHCARE
SPRING SEMESTER, 2021 – Monday Sections (Labs 1-4) 4 CREDIT HOURS

CO-INSTRUCTOR: Mike Moorhouse, PhD (HPNP room 4148, mmoorhou@phhp.ufl.edu)
CO-INSTRUCTOR: Sarah Collins, MPH (sarahcollins@ufl.edu)

LAB INSTRUCTORS FOR SECTIONS:
Lab 01 (14069 & 29356) Zuhair Haleem zuhair.haleem@phhp.ufl.edu M 8:30a – 10:25a, HPNP, G-307
Lab 02 (14102 & 29358) Melanie Hechavarria hechavarria@ufl.edu M 9:35a – 11:30a, HPNP, G-316
Lab 03 (14103 & 29359) Melanie Hechavarria hechavarria@ufl.edu M 11:45a – 1:40p HPNP, G-307
Lab 04 (14104 & 29361) Melanie Hechavarria hechavarria@ufl.edu M 3:00p – 4:55p HPNP, G-316

PREREQUISITES
Students must either be a senior in the Health Science major of the Bachelor of Health Science program, or have permission from the Faculty Supervisor.

COURSE OVERVIEW
This course is designed to facilitate the development of critical thinking and problem-solving skills in healthcare. In the beginning, Lab Instructors will provide a general overview of logical fallacies and cognitive errors, both in a general sense as well as within a medical/rehabilitation context. After the initial introductory modules, students become more active in their own learning by participating in five, small-group comprehensive case studies. A problem-based learning approach is used in which students are provided with carefully selected clinical, legislative, ethical, and professional problems and are provided guidance in problem solution by the Lab Instructor. Students work in small groups to collect information relevant to problem solution, and take a hypothesis-oriented approach to dealing with each task.

COURSE OBJECTIVES
By the end of the course, the student should:

1. Develop a knowledge base that enables the critical evaluation of a wide variety of problems and that encourages the use of a systematic approach to problem appraisal, data collection, and problem-resolution.

2. Develop firm decision-making and critical reasoning skills that include knowledge of how to use available informational resources to test hypotheses about problem solution.

3. Develop self-directed learning skills, clinical skills, and group and interpersonal skills that foster productive activity within the interdisciplinary health care team.

4. Develop an appreciation of the need for health care assessments, interventions, and decisions to be evidence-based, and for health care practitioners to know how to find, appraise, and apply the best evidence supporting the decisions they make.

REQUIRED TEXT
There is no required text for this course however students will periodically be provided articles for which they must read prior to class.
Grading/evaluation of student performance is based upon three in-lab quizzes, group case reports, attendance, participation, peer evaluation feedback, and professionalism.

- **Quizzes** (4 total; 5 points each; 20 points total) - Students will complete 4 quizzes. Quiz one will be the syllabus quiz and quizzes two-four will cover content presented in module lectures. Each quiz will be comprised of multiple choice questions. Students will take each quiz during the first 5 minutes of their assigned lab section and must use the Honorlock feature on CANVAS. These quizzes are CLOSED notes.

  Students attempting to complete the quiz using outside materials will receive a zero on the quiz, lose 1 full letter grade from the course, and be referred to the Dean of Students.

  **NO LATE QUIZZES will be accepted UNLESS the student meets the “make-up policy” eligibility. This can be found under the GENERAL POLICIES AND INFORMATION section of this syllabus.**

- **Lab Activities** (3 total; 4 points each; 12 points total) - Between weeks three through five, students will participate in group activities during class. These activities are collaborative assignments that allow students to engage with content and skills that will be relevant to the upcoming case studies. All students must individually upload their activities to Canvas, where they will be graded for completion.

  Only students attending class, whether in-person or by way of Zoom, will be eligible to upload an activity assignment. Any student who submits an activity assignment but was not present during class will receive a zero for that assignment, lose 1 full letter grade from the course, and be referred to the Dean of Students.

  **NO LATE ACTIVITIES will be accepted UNLESS the student meets the “make-up policy” eligibility. This can be found under the GENERAL POLICIES AND INFORMATION section of this syllabus.**

- **Case Study Group Reports** (4 total; 5 points each; 20 points total) - Students will be assigned to Treatment Teams of 3 or 4 and work to question and diagnose patient cases. Prior to Comprehensive Case Study 1, the Lab Instructor will assign students into Treatments of 3 or 4 students. These teams will remain in place for the remainder of the semester. For each of the 4 case studies, the TA will assign students to one of four unique roles and every student will, at some point, take on each role. The roles are as follows:

  - **“Leader”** - The Leader is ultimately responsible for organizing the group and ensuring group members are staying on point. The Leader will also be responsible for reviewing the case report for format, clarity, comprehensiveness, and submitting the final case report to Canvas.

  - **“Illness Script Specialist”** - The Illness Script Specialist will be in charge of organizing the group in completing 5 illness scripts for the case report. The Specialist will be responsible for completing a minimum of 2 scripts and will delegate responsibility for the remaining 3 scripts as they see fit. Illness scripts are brief summaries of illnesses that include, but are not limited to, pathophysiology, epidemiology, symptom characteristics, and common diagnostic tests.

  - **“Question Asker”** - The Question Asker will be in charge of consulting with group members to formulate question to ask the “patient” (i.e., TA). Throughout questioning, the TA reserves the right to “spot check” the Question Asker by asking them to provide a reflection statement, open/closed ended question, or summary statement.

  - **“Treatment Expert”** - The Treatment Expert will be take the lead in developing the treatment clinical question (using PICO) and consult with other group members to finalize the question. They will also be in charge of finding research that supports the treatment option. The Treatment Expert will document which search engine was used, keywords for the search, and Boolean operators.
Each report will be a 2-page, single spaced summary of findings (including but not limited to patient history, presenting symptoms, diagnosis and justification, and treatment). Formatting expectations will be given prior to the first Comprehensive Case Study.

Each Treatment Team is required to work independently as cross-team consultation/collaboration is strictly prohibited. Any team who submits a case report in which the team or single member of the team consults or collaborates with a person from a different team, the colluding members of each team will receive a zero for the case report, lose 1 full letter grade from the course, and be referred to the Dean of Students.

Any student who has an unexcused absence during a case study will 2 points for each day missed. LATE SUBMISSIONS WILL NOT BE ACCEPTED FOR FULL CREDIT. The Group Leader will lose all points for the case, and the remaining group members will lose 2 points. If the wrong file is uploaded and the correct file is not resubmitted before the deadline, the report is considered late.

- **Peer Evaluations** (4 total; 2 points each; 8 points total) – Following each Case Study, group members will evaluate their peers. Students must provide a substantive evaluation to receive full credit. Note – these evaluations will not affect your peer’s grade in the class; rather, your feedback will be used by your peer to complete a reflection assignment.

- **Peer Evaluation Reflection** (5 points) – Using the peer evaluations, students will complete a 2-page, reflection paper describing their effectiveness in each role as well as group interaction strengths, weaknesses, and growth over the duration of the semester.

- **Case Study Creation** (30 Points) – Throughout the semester, each group will work with their team to create a Case Study. You and your team are responsible for developing all aspects of a comprehensive case study and are essentially working backward to develop a case. Each week you will submit a portion of the case study. You will provide a 15-minute presentation of your case study to your classmates during your Week 10 lab session. Here, other groups will provide you feedback and suggestions to improve your case study. You will then have one additional week to make adjustments and submit your final case study. The best case study per lab section will be used as Case Study 4 for a different lab section. NO LATE CASE STUDIES will be accepted. Further instructions will be provide in lab and via Canvas. Each student is expected to submit individually.

- **Professionalism** (5 points) – Students will begin with 5 professionalism points. Any student who is identified by the Lab Instructor as “unprofessional” will lose 1 point for every infraction. Unprofessional behaviors include, but are not limited to, disrupting classmates, being chronically late to class, using electronic devices when not approved or for reasons other than course work, etc. If a student wants to contest a professionalism point deduction, then he or she should contact Dr. Moorhouse via email or schedule an appointment. In addition, students are expected to attend all their labs.
GRADING
The student's final grade will be based on the number of points accumulated during the course:

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<thead>
<tr>
<th>Activity</th>
<th>Points</th>
<th>Grade Range</th>
<th>Points</th>
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<tbody>
<tr>
<td>Quizzes (x4)</td>
<td>20</td>
<td>93-100 Points</td>
<td>4.00</td>
</tr>
<tr>
<td>Lab Activities (x3)</td>
<td>12</td>
<td>90-92.99 Points</td>
<td>3.67</td>
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<tr>
<td>Case Study Group Reports (x4)</td>
<td>20</td>
<td>83-86.99 Points</td>
<td>3.00</td>
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<tr>
<td>Peer Evaluations (x4)</td>
<td>8</td>
<td>87-89.99 Points</td>
<td>3.33</td>
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<tr>
<td>Peer Evaluation Reflection</td>
<td>5</td>
<td>80-82.99 Points</td>
<td>2.67</td>
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<tr>
<td>Case Study Creation</td>
<td>30</td>
<td>77-79.99 Points</td>
<td>2.33</td>
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<tr>
<td>Professionalism</td>
<td>5</td>
<td>70-76.99 Points</td>
<td>2.00</td>
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<tr>
<td>Total</td>
<td>100</td>
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<td>1.00</td>
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For more information visit: [http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html](http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html).

GENERAL POLICIES AND INFORMATION

COVID-19 PROTOCOL FOR IN-PERSON STUDENTS
In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and enhance the safety of our in-classroom interactions.

A. Students are required to wear approved face coverings that fully cover their nose and mouth at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. If you fail to comply, you will be asked to leave class and you will be reported to the Program Director as well as the Office of Student Conduct and Conflict Resolution.

B. This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Students must utilize designated seats and maintain appropriate spacing between one another. Please do not move desks or stations.

C. Sanitizing supplies are available in the classroom if students wish to wipe down your desks prior to sitting down and at the end of the class.

D. Students must follow instructor guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.

E. Students must be tested and cleared to return to campus AND get repeated testing (and clearance) every two weeks. Students not cleared to return to campus will not be permitted to attend class.

F. Students who are not cleared to return to campus may only participate in class via Zoom at the instructor’s discretion.

PROFESSIONALISM
Students are expected to conduct themselves in a professional manner in all communication with the course instructor and any staff that assist with this course. Moreover, students are expected to arrive to class on-time, turn off all computers and cell phones, and conduct themselves accordingly (e.g., no excessive talking during class, cell phone use, or distracting classmates).

TECHNOLOGY POLICY
The use of any technology, including cell phones, computers, tablets, etc., at any point during class is strictly meant to serve class purposes. Should you need to keep your cell phone on hand due to a personal reason, please inform the Lab Instructor prior to class.
**MAKE-UP POLICY**

Make-ups will be given for Quizzes and Lab Activities only and will be granted based upon the following circumstances: (a) illness, (b) serious family emergencies, (c) military obligation, (d) religious holidays, (e) participation in official university activities, or (f) court-imposed legal obligations. For circumstances a. and b., students must contact the faculty via email within 48 hours of the missed quiz, and the faculty may request the student provide medical or other forms of documentation to validate the make-up.

For all other circumstances, students must contact the faculty at least 72 hours prior to the anticipated missed day and provide reasonable documentation confirming the obligation/activity. The instructor will provide make-up materials to the student and he/she will have 1 week to complete the make-up.

Missed quizzes or activities due to severe weather or poor internet connectivity will be reviewed on a case by case basis. If you are unable to access consistent internet, please email the instructor ahead of time (if possible); otherwise email the instructor at the earliest time possible.

**ACCOMMODATION POLICY**

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office [http://www.dso.ufl.edu](http://www.dso.ufl.edu) within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

**ACADEMIC HONESTY**

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: [https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/](https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/).

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

**COUNSELING & STUDENT HEALTH**

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing
issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. Online and in-person assistance is available.

- You Matter We Care website: http://www.umatter.ufl.edu/. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.

- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 352-392-0627 or check out the web site at: https://shcc.ufl.edu/

- Crisis intervention is always available 24/7 from:
  Alachua County Crisis Center
  352-264-6789
  http://www.alachuacounty.us/DEPTS/CS/S/CRISSCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

**INCLUSIVE LEARNING ENVIRONMENT**

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida’s Non-Discrimination Policy, which reads, “The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans’ Readjustment Assistance Act.” If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu.

**ONLINE COURSE EVALUATION**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.
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<thead>
<tr>
<th>Week</th>
<th>BEFORE Lab</th>
<th>IN Lab</th>
<th>DUE DATES for Assignments</th>
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<tbody>
<tr>
<td>Week 1 (January 11-13)</td>
<td></td>
<td>Class Overview/Syllabus Quiz</td>
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<td>Week 2 (January 18-20)</td>
<td>NO LAB – HOLIDAY</td>
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<tr>
<td>Week 3 (January 25-27)</td>
<td>View lectures on Cognitive Biases</td>
<td>Quiz 2/In-class Activity 1</td>
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<tr>
<td>Week 4 (February 1-3)</td>
<td>View lectures on PICO Model and Causal Evidence</td>
<td>Quiz 3/In-class Activity 2</td>
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<tr>
<td>Week 5 (February 8-10)</td>
<td>View lectures on Illness Scripts, Semantic Qualifiers, &amp; Summary Statements</td>
<td>Quiz 4/In-class Activity 3</td>
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<tr>
<td>Week 6 (February 15-17)</td>
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<td>Case Study 1, Day 1</td>
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<td>Week 7 (February 22-24)</td>
<td>Complete Illness Scripts for Case Study 1</td>
<td>Case Study 1, Day 2</td>
<td>Case Study 1 DUE Monday, February 22nd by 11:59PM</td>
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<td>Peer Evaluation for Case Study 1 DUE Monday, February 22nd by 11:59PM</td>
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<td>Week 8 (March 1-3)</td>
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<td>Case Study 2, Day 1</td>
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<tr>
<td>Week 9 (March 8-10)</td>
<td>Complete Illness Scripts for Case Study 2</td>
<td>Case Study 2, Day 2</td>
<td>Case Study 2 DUE Monday, March 8th by 11:59PM</td>
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<td>Peer Evaluation for Case Study 2 DUE Monday, March 8th by 11:59PM</td>
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<tr>
<td>Week 10 (March 15-17)</td>
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<td>Present Created Case Study</td>
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<td>Week 11 (March 22-24)</td>
<td>NO LAB—CREATED CASE REPORT DUE</td>
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<td>Created Case DUE by Monday, March 22nd by 11:59PM</td>
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<tr>
<td>Week 12 (March 29-31)</td>
<td>None</td>
<td>Case Study 3, Day 1</td>
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<tr>
<td>Week 13 (April 5-7)</td>
<td>Complete Illness Scripts for Case</td>
<td>Case Study 3, Day 2</td>
<td>Case Study 3 DUE</td>
</tr>
<tr>
<td>Study 3</td>
<td>Monday, April 5&lt;sup&gt;th&lt;/sup&gt; by 11:59PM</td>
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<td>Peer Evaluation for Case Study 3 DUE Monday, April 5&lt;sup&gt;th&lt;/sup&gt; by 11:59PM</td>
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<tr>
<th>Week 14 (April 12-14)</th>
<th>Case Study 4, Day 1</th>
<th>Case Study 4, Day 2</th>
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<tbody>
<tr>
<td>Week 15 (April 19-21)</td>
<td>Complete Illness Scripts for Case Study 4</td>
<td>Case Study 4 DUE Monday, April 19&lt;sup&gt;th&lt;/sup&gt; by 11:59PM</td>
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<tr>
<td>Peer Evaluation for Case Study 4 DUE Monday, April 19&lt;sup&gt;th&lt;/sup&gt; by 11:59PM</td>
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<tr>
<td>Peer Evaluation Reflection DUE Friday, April 30&lt;sup&gt;th&lt;/sup&gt;</td>
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