Syllabus Special Study: Critical Analysis of Infectious Disease Literature GRAD5984 CRN 91991 Fall 2022

Course Leaders:

James Weger-Lucarelli Assistant Professor 307 Fralin Dept. of Biomedical Sciences and Pathobiology VA-MD College of Veterinary Medicine Phone: 540-231-6594 Email: weger@vt.edu

Office Hours: 30 min after class or at other times by appointment. Ann M. Stevens Professor 5036 Derring Hall Dept. of Biological Sciences College of Science Phone: 540-231-9378 Email: ams@vt.edu

30 min after class or at other times by appointment.

Class day and time: Tues 12:30 pm – 1:45 pm **Classroom:** Fralin Auditorium

Website: See Canvas at <u>https://canvas.vt.edu/_The course syllabus</u>, weekly readings and peer evaluation forms will be posted here.

Additional help: Any student recognized by the university as needing special learning accommodations should request an appointment to meet with the instructor in private to discuss their individual situation.

Course Description: Students will participate in a journal club course where they will review primary literature in the general topic area of the weekly CeZAP seminar or written by the weekly CeZAP seminar speaker.

Oral presentation: Each student will give **oral presentations as part of a team (one or two** depending on the number of students enrolled in the course) during the semester on a topic relevant to the next CeZAP seminar. The instructors will assign the general topic area and presentation date to each team at the first organizational meeting. The team will then pick **a primary research article** (not a review) of interest to them from the assigned topic area, with preference to articles from the laboratory of the CeZAP seminar speaker. Students are strongly encouraged to discuss appropriate specific topics with the instructors. The instructors' final <u>approval must be obtained for the article selected</u>. The <u>article should be recent (**published within the last 5 years**) from a high-quality journal in a relevant field (e.g., microbiology, immunology, virology). A PDF file of the article should be provided to the instructors so that it may be <u>posted on the course website at least one week prior to the date of the oral presentation</u>. The team oral presentation, with appropriate Powerpoint visual aids, should be ~30 minutes in length and include appropriate background information (e.g., introduction by one student and methods by another student, team presentation of results and discussion/conclusion (or if three students discussion/conclusion by the third student)), leaving ~30 minutes for group questions/discussion both during and after the presentation. In order to provide</u>

valuable feedback to the speakers, the presentation will be anonymously reviewed by other course participants (instructors and students) based on overall organization, content and delivery. An example evaluation sheet is attached.

<u>Class participation</u>: To facilitate group discussion, each student will be required to raise at least one question/comment during group discussion. Participation in at least 80% of class sessions is considered passing. Students who notify the instructor with legitimate reasons for missing class may turn in a one-page written statement BRIEFLY summarizing in a few sentences each (i) the hypothesis tested, (ii) the methods used (iii) the conclusion of the study and significance to the field and (iv) limitations or critiques of the study to earn participation for the missed class.

Measurable learning objectives:

Having successfully completed the course, the students will be able to:

- evaluate the primary literature in a critical manner
- explain key concepts from the primary literature reviewed
- develop teamwork skills
- demonstrate effective communication skills
- debate scientific topics in a professional manner

Prerequisites and Co-requisites:

Graduate students: good standing in a graduate degree program.

Veterinary students: third year standing in the DVM curriculum.

Medical students in MD curriculum.

Undergraduate students: Senior undergraduate students who wish to take the course require the approval of the course leader.

Texts and Special Teaching Aids:

No published text is required. All course materials will be provided via Canvas. No paper copies will be provided.

Clothing, special equipment:

Refer to the Student Handbook. None required.

Attendance Policy:

Attendance is required for all registered students. Students must attend every class or complete the alternative assignment, with the approval of the course instructors.

Grading Policies and Standards:

Refer to the Student Handbook. This course is graded as Pass/Fail.

Lectures/Attendance: You must actively engage in the required team oral presentation(s) and participate in group discussion at a level $\geq 80\%$ to pass the course.

Disabilities, Professionalism, Academic Misconduct, Honor Code, Drop/Add Policy:

Classroom conduct: Faculty Handbook Section 9.9 describes the responsibility of an instructor to maintain a positive learning environment. It states: Maintaining a good learning environment in the classroom is an important part of a faculty member's responsibility as a teacher. The teacher

should endeavor to create a classroom atmosphere that is comfortable and welcoming of all students, including women and members of minority groups. Disruptive classroom conduct on the part of some students may be distracting, annoying, or intimidating to other students.

Honor code: The Honor Code pledge that each member of the university community agrees to abide by states: "As a Hokie, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do."

Students enrolled in this course are responsible for abiding by the Honor Code. A student who has doubts about how the Honor Code applies to any assignment is responsible for obtaining specific guidance from the course instructor before submitting the assignment for evaluation. Ignorance of the rules does not exclude any member of the University community from the requirements and expectations of the Honor Code. For additional information about the Honor Code, please visit: <u>www.honorsystem.vt.edu</u>.

Class #	Date	Topic (CeZAP seminar speaker)	Presenter	
1	8/23	Organizational meeting; discussion of appropriate presentation styles; assignment of presentation time slots	James Weger-Lucarelli and Ann Stevens	
2	8/30	Maria Elena Bottazzi	Example team presentation by Weger-Lucarelli and Stevens	
3	9/6	TBD	1A and 2A	
4	9/13	Luis Escobar	3A and 4A	
5	9/20	Rotation 1 Talks	Prep time for rotation talks or other group review activity	
6	9/27	Hanh Lam	5A and 6A	
7	10/4	Martha Clokie	7A and 8A	
8	10/11	Brian Kvitko	9A and 1B	
9	10/18	Rotation 2 Talks	Prep time for rotation talks or other group review activity	
10	10/25	Leda Kobziar	2B and 3B	
11	11/1	Gregory Glass	4B and 5B	
12	11/8	Kevin Lahmers	6B and 7B	
13	11/15	Rotation 3 Talks	Prep time for rotation talks or other group review activity	
14		Thanksgiving Break		
15	11/29	John Aggrey	8B and 9B	
16		End of Semester Wrap Up		

Schedule:

Oral presentation evaluation

Speaker(s)	Торіс	Date			
Rate each point detailed below using a scale from 1(strongly disagree) to 5 (strongly agree)					
Overall organization:					
The relevance of the topic to microbial phys	iology was made clear from t	the beginning.			
The background information provided was a	ppropriate for the journal ar	ticle under discussion.			
The information presented was backed up b	y credible, current reference	<u>'</u> S.			
The presentation of information was made i	n a logical manner.				
The speaker(s) used transitions and summar	ies effectively at appropriate	e places.			
The conclusions provided a clear summary a	nd sense of completeness.				
<u>Content:</u>					
The speaker(s) effectively summarized the h	ypothesis being tested in the	e journal article.			
The speaker(s) outlined the procedures used	to test the hypothesis prop	osed in the article.			
The speaker(s) were familiar with all of the t	echniques used in the prima	ry journal article.			
The speaker(s) discussed the credibility of the	e scientific evidence in the jo	ournal article.			
The speaker(s) clearly stated the primary fin	dings of the journal article ar	nd their significance			
to the field.					
The speaker(s) used appropriate terminolog	y during the presentation.				
<u>Delivery:</u>					
Speaker(s) demonstrated mastery of materia	al presented.				
Speaker(s) spoke clearly with good volume.					
Speaker(s) maintained good eye contact.					
Speaker(s) used only purposeful body move	ment.				
Presentation was of appropriate duration fo	r assigned time.				
Visual aids supported the speakers' goals.					
Technical language used was at a level approximately approxi	opriate for audience.				
The speaker(s) were able to captured audier	nce interest/participation.				
Constructive comments about each	speaker (minimally on	<u>e strength and one</u>	opportunity for		

improvement):