COURSE SYLLABUS

# BIOL 695/BIOS 704 Tularemia an Ongoing Biothreat

# CRN 24614/24586 - DL1

# Spring 2021

##### Online via Blackboard

##### Wednesdays, 4:30 pm - 5:45 pm

(Some Synchronous, some Asynchronous)

**George Mason University**

**College Of Science**

**School Of Systems Biology**

**PROFESSOR: Dr. Monique van Hoek.**

Office location: Discovery Hall, Room 156

Office hours: By appointment, 10 a.m. to 6 p.m.

Email address: [mvanhoek@gmu.edu](mailto:mvanhoek@gmu.edu)

**SPECIAL NOTES:**Wed Jan 27th 2021 -Wed April 28th 2021. **No spring break this year.**

Examination Period: Mon. May 3 - Mon. May 10

**Student Evaluations of Teaching/Course**: Will be done online via Blackboard. Please complete by April 28th.

**COURSE DESCRIPTION**

1. **Prerequisites:** An undergraduate lecture/lab course in microbiology.
2. **Course description:** An up-to-datestudy of the ongoing Tularemia outbreaks world-wide, and the epidemiology and ongoing threat presented by Tularemia. Methods of diagnostics, detection and sequencing will also be covered. This course is Distance Learning and will be provided via Blackboard.
3. **Course objectives:** To introduce the student to more advanced concepts of the biothreat bacteria, with a focus on Tularemia. Current research and historical lessons of Tularemia outbreaks will be discussed. Lectures will cover a topic to give students an understanding of the particular topic. Assigned readings and summaries are a requirement for this class. A timely, pertinent paper will be discussed following each lecture topic, emphasizing to the student current research in that particular area. Additional activities for grades may include a class blog and other projects.
4. **Schedule:** We will meet **“Synchronously”** **on Blackboard** during our Class meeting time for the **first class**, **Special Drop-In office hour sessions** and **a final review session** at the end. Lectures and Student presentations will be delivered **Asynchronously via Blackboard**.

**REQUIRED ASSIGNEMNTS:**1. **Presentations:** Presentations will be made of assigned papers that support the lecture material. Students are expected to read the assigned papers before class and be prepared to discuss them following the lecture. Each paper will be presented by a pair students (30 minutes long) or by single students, depending on number of students. (30% of grade)

2. **Other Homework**: Blog posts, worksheets, etc. (20% of grade)

3. **Participation/Summaries**: students must submit a brief summary of each paper to be presented each week, unless they are the presenters of that paper. Each summary should be brief (~100 words) and should include a question they have for the presenter. (20% of grade)

4. **Final Paper** in Lieu of Final Exam. (30% of grade)

**EXAMS:**

**Final Paper** in Lieu of Final Exam

**GRADING:**

**OVERALL GRADE:**

**Class Presentation 30%**

**Final Term Paper 30%**

**Participation/Summaries 20%**

**Homework/Blog Posts 20%**

**TOTAL POINTS= 100%**

**A+ ≥95%, A = 94-90%, A- = 89-85%, B+ = 84-80%, B = 79-75%, B- = 74-70%, C = 69-65, F = <65%**

**REQUIRED TEXTS:** None. Required reading of papers and reading of as much background material as needed for student’s level of knowledge.

**SUGGESTED TEXTS**

**Francisella Tularensis: Biology, Pathogenicity, Epidemiology, and Biodefense**. Annals of the New York Academy of Sciences. Volume 1105, Issue 1, Pages: ix-x, 1-419; June 2007. <https://www.nyas.org/annals/francisella-tularensis/> (Available via GMU Library).

<https://nyaspubs-onlinelibrary-wiley-com.mutex.gmu.edu/toc/17496632/2007/1105/1>

For example: [**Molecular Epidemiology, Evolution, and Ecology of Francisella:**](http://mutex.gmu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=25848016&site=ehost-live)

<http://mutex.gmu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=25848016&site=ehost-live>

**Required reading: All required reading is available free online or via GMU Library. See Class on Blackboard for required reading for each week.**

**TENTATIVE CLASS LECTURE AND PRESENTATION SCHEDULE - TBA**

**Note Special Lecture dates with invited speakers.** The number of presentations and homework assignments will be adjusted according to the class size.

**GMU Honor Code:** *The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.*