**BSC 438 Emerging Infectious Diseases**

Spring 2016

MWF 1-1:50; Byrd Biotechnology Science Center Room 101

Dr. Gary Schultz

schultzga@marshall.edu

Office: 309 Science Hall. Phone: 304-696-7057

Office Hours:MW 9–11 AM; T 10–12 AM

**Course Description:**

**BSC 438 – Emerging Infectious Diseases -** Introduces students to infectious diseases that are either newly emergent or have returned to prominence within the last decade.

**Required Textbooks:**

Lecture: Emerging Epidemics – The Menace of New Infections by Madeline Drexler (paperback – may be ordered from Amazon, Barnes and Noble, AbeBooks.com, other used booksellers.

Additional Reading may be required during the semester. These readings will be online or provided by the instructor.

Course Student Learning Objectives:

The overall objective of this course is to introduce the principles and processes of biology through an emphasis on the natural world and on current topics in the field of biology. Laboratories will present simple experiments to further strengthen those concepts learned in lecture.

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| **Student Learning Outcomes** | **How students will practice outcome** | **How achievement will be assessed** |
| Students will be exposed to the study of epidemiology. | In class lectures, group work, class discussions, writing assignments. | Exams, quizzes, group projects, participation grades, presentations. |
| Students will explore how emerging infectious diseases have affected the history of mankind and how they may impact our future. |
| Students will learn about specific emerging and re-emerging diseases |

**University Policies**

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to [www.marshall.edu/academic-affairs](http://www.marshall.edu/academic-affairs) and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to <http://www.marshall.edu/academic-affairs/policies/> .

Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

**Course Requirements**

**Exams, quizzes, in-class activities**

There will be four ***scheduled*** exams. **Scheduled** exams will consist of multiple choice, short answer, fill in the blank, and essay questions. Each exam will be worth 25 points. Unscheduled quizzes on reading material or in-class activities or homework will occur frequently (at least once per week and possibly every day).

If you miss any class in which points were available, you **must** provide an acceptable excuse; otherwise, you will receive a **ZERO**. All material that must be made up in which an acceptable excuse is provided will be made up during “Dead Week”. **Make up exams will be short answer and/or essay. In-class activities will be made up by either a quiz given during Dead Week or by a research paper on the topic missed. It is in your very best interest to NOT miss class.**

**Course Grading:**

Students will be evaluated as follows:

Four exams @ 25 points each 100 points

Quizzes, homework, and in-class activities ?? points

Participation in class discussions 10 points

Group presentations 50 points

**Final letter grade: ≥89.5% of total available points = A; 79.5-89.4% of points = B; 69.5-79.4% of points = C; 59.5-69.4% points = D; < 59.5% of total available points = F.**

**Detailed policies**

**Grading and Extra Credit.** Please do not ask for special consideration, particularly at the end of the semester. If you are concerned about your grade, come see me as early as possible when there may still be time to affect a change.

**Attendance.** Attendance at all scheduled lectures and exams is expected. Lectures, discussions, and presentations only occur once. If you miss class, you are likely to miss points due to missing a quiz, writing assignment, discussion, etc. Anything we cover in class, including lectures, discussions, movies, presentation, or any exercise will be included on exams.

**Conduct in class:** Please behave respectfully during class. Behaviors such as excessive chatting with other students, texting, etc., are disruptive to the instructor and to other students. Students habitually engaged in these activities may be asked to leave the class that day. If you need to text, e-mail, or surf the web during class, please **DO NOT COME** to class. Please turn off (silence) your cell phones, pagers, etc. No electronic devices will be needed, and none will be permitted, during exams. The use or access of an electronic device during an exam will be considered evidence of academic dishonesty.

**Office Hours –** Feel free to drop by at any time during **posted office hours**, however people who call or email ahead for an appointment will be given priority. ***An appointment is required outside of posted office hours.***

***ANNOUNCEMENTS will be sent to Marshall Emails*. You are expected to check regularly so as not to miss any important course-related information.**

**Academic Dishonesty**

I will report any incident to the Chairman of the Department of Biological Sciences. You may be placed on academic probation, suspended or dismissed from the University following being found guilty of Academic Dishonesty. Please see the following web site for the official Marshall University statement; <http://muwww-new.marshall.edu/academic-affairs/forms-policies/>

**Social Justice**

NO one will be discriminated against on the bases of race, sex, ethnicity, age, sexual orientation, social class, abilities or differing viewpoints. Each student will be viewed as a valuable and essential part of this class.

**Inclement weather**

If the University is closed for weather related reasons, this class will be cancelled and we will adjust our schedule.

**Notes:**

\*\*You are paying very good money to be here. **YOU** are responsible for your own learning and grade. I will be here more as a guide for your study other than as an omnipotent dictator.

\*\*Teaching and learning is a two-way street. Your participation and feedback is absolutely needed to make this course a success and, therefore, is expected. With this regard, I expect that you will be prepared to answer and ask questions during the lecture. If you fall asleep during the lecture, so will I. I’m going to have fun and I hope you will too!

**Approximate Schedule and Material to be Covered –** The following is an ***estimated*** class schedule of topics to be covered. It is not my intention to cover every topic in its entirety. It is recommended that students read all materials given as there will be quizzes on the material. Lectures will highlight specific aspects of each topic. Test questions will come from any and all material presented – including any movies or videos shown during class.

**Tentative Schedule**

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| **Class #** | **Day** | **Date** | **Topic** |
| 1 | M | 11-Jan-16 | Syllabus/Hantavirus https://www.learner.org/resources/series121.html# |
| 2 | W | 13-Jan-16 | Intro/Epidemiology/Influenza |
| 3 | F | 15-Jan-16 | Intro/Epidemiology/Influenza |
| **No Class** | **M** | **18-Jan-16** | **NO CLASS** |
| 4 | W | 20-Jan-16 | Intro/Epidemiology/Influenza |
| 5 | F | 22-Jan-16 | Intro/Epidemiology/Influenza |
| 6 | M | 25-Jan-16 | Intro/Epidemiology/Influenza |
| 7 | W | 27-Jan-16 | Intro/Epidemiology/Influenza |
| 8 | F | 29-Jan-16 | Intro/Epidemiology/Influenza |
| **9** | **M** | **1-Feb-16** | **EXAM 1** |
| 10 | W | 3-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 11 | F | 5-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 12 | M | 8-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 13 | W | 10-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 14 | F | 12-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 15 | M | 15-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 16 | W | 17-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| 17 | F | 19-Feb-16 | Zoonoses/Foodborne/AntibioticResistant/Pathogenesis |
| **18** | **M** | **22-Feb-16** | **EXAM 2** |
| 19 | W | 24-Feb-16 | Neglected and New Diseases/Investigations/Case Studies |
| 20 | F | 26-Feb-16 | Neglected and New Diseases/Investigations/Case Studies |
| 21 | M | 29-Feb-16 | Neglected and New Diseases/Investigations/Case Studies |
| 22 | W | 2-Mar-16 | Neglected and New Diseases/Investigations/Case Studies |
| 23 | F | 4-Mar-16 | Neglected and New Diseases/Investigations/Case Studies |
| 24 | M | 7-Mar-16 | Neglected and New Diseases/Investigations/Case Studies |
| 25 | W | 9-Mar-16 | Presentation 1 |
| 26 | F | 11-Mar-16 | Presentation 2 |
| 27 | M | 14-Mar-16 | Presentation 3 |
| **28** | **W** | **16-Mar-16** | **Exam 3** |
| 29 | F | 18-Mar-16 | CDC Zombie case study |
| **No Class** | **M** | **21-Mar-16** | **NO CLASS** |
| **No Class** | **W** | **23-Mar-16** | **NO CLASS** |
| **No Class** | **F** | **25-Mar-16** | **NO CLASS** |
| 30 | M | 28-Mar-16 | Potential make-up |
| 31 | W | 30-Mar-16 | Presentation 4 |
| 32 | F | 1-Apr-16 | Presentation 5 |
| 33 | M | 4-Apr-16 | Presentation 6 |
| 34 | W | 6-Apr-16 | Presentation 7 |
| 35 | F | 8-Apr-16 | Presentation 8 |
| 36 | M | 11-Apr-16 | Presentation 9 |
| 37 | W | 13-Apr-16 | Presentation 10 |
| 38 | F | 15-Apr-16 | Presentation 11 |
| 39 | M | 18-Apr-16 | Presentation 12 |
| 40 | W | 20-Apr-16 | Presentation 13 |
| **41** | **F** | **22-Apr-16** | **Exam 4** |
| 42 | M | 25-Apr-16 | Dead week |
| 43 | W | 27-Apr-16 | Dead week |
| 44 | F | 29-Apr-16 | Dead week |