Mississippi Valley State University Department of Natural Sciences & Environmental Health Biology Seminar, 1 Credit hr. Fall 2017

Lecture: H 10:50 a.m. - 12:05 p.m., FLW 101

Instructor: DR. Julius. O. Ikenga

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Office Hours:	MWF	8:00 – 9:50 a.m. and
		2:00-4:00 p.m.,
	Т	8:00 a.m3:40 p.m.

Suggested Journals:

- 1. American Journal of Science
- 2. American Scientist
- 3. Contamination and Toxicology
- 4. Journal of Chemical Education
- 5. Journal of Environmental Health

Course Description:

Discussion of relevant research, scientific papers, and current events in biology and related natural science disciplines. Interrelatedness of the disciplines of natural sciences is emphasized through joint meetings of Natural Sciences and Environmental Health at the same level (freshman biology-chemistry environmental health seminars, for example). Relevance and significance of the understanding of the natural principles in proper context and handling of personal and societal issues are a major focus of the discussions. Group and individual academic advisement sessions are arranged at appropriate times. (1)

Prerequisite: None.

Purpose.

To discuss relevant research, scientific papers, and current events in biology and related natural science disciplines.

General Course Goals:

The overall course goals for Biology Seminar include:

- 1. Providing opportunity for all students to become familiar with the Academic Program Maps;
- 2. Kindling students' interest in the sciences & expanding their networking opportunities;
- 3. Increasing students' perspective of science concepts, theories, principles and main components of a scientific paper;
- 4. Demonstrating the use of technology to search and retrieve science documents online and enhancing students skills in handling personal and societal issues; and
- 5. Presenting interrelatedness of disciplines of natural sciences.

Student Learning Outcomes:

Upon completion of Biology Seminar Students will be able to:

- 1. Demonstrate the skills in searching and retrieving science documents online;
- 2. Articulate basic concepts, theories & principles of natural science; and
- 3. Discuss steps of Scientific Research/main components of a scientific paper.

Course Requirements.

Each Student is Required to:

- 1. Attend classes on the scheduled class day. A signed excuse from the VP of Student Affairs is required for *EACH* absence.
- 2. Participate in class discussions, complete ALL class assignments and home works.
- 3. Turn in each homework on the announced due dates & time.
- 4. Demonstrate knowledge of course content on tests.
- 5. TYPE ALL ASSIGNMENT before submission on due date.

Technology Infusion.

Technology is integrated into the course to enhance and facilitate learning and understanding. Type of technology used includes but not limited to:

- 1. Power-point presentation with overhead projector;
- 2. Laptop Computer access, display and storage;
- 3. Computerized library search with (EBSCO) Host Databases;
- 4. Use of Internet searches for homework assignments; virtual lab projects, and
- 5. Computer applications for collecting, analyzing, and displaying data.

Teaching & Learning Strategies.

The main instructional model for this course is collaborative learning. The instructor will set course content, course objectives, and methods of classroom assessment. The course will incorporate the following instructional strategies: class discussion, online activities, assigned readings, and/or individual projects. *Students are encouraged to actively participate in activities, ask questions, and contribute comments for discussion*. Students are also encouraged to offer input regarding instructional strategies and assignments. *Most importantly, students are expected to be active learners and to ask for clarification when they have questions.* In order to be successful in the class, it is important that students, read the assigned material, and submit assignments and be prepared to discuss what they have read. The goal of this approach is to develop active learning environment that addresses a variety of learning styles, promotes critical thinking, and fosters creativity.

Make-up Policy. Makeup examination will not be given unless the student has a legitimate excuse for failing to take the exam on the scheduled day and time. Such a student must make arrangements with Dr. Ikenga for a makeup examination before the next date.

Assessment Methods: Students will be assessed on prompt attendance, assignments, Book review, syllabus quiz, class participation, and formal oral presentation. The Oral Presentation will be with Power-point. Final grade will be determined by dividing the total points that you have earned in this class by the total semester points possible (810) and then multiply the result by 100.

Assessments	Points
Prompt Attendance	50
Assignments (7) @ 50 points each	400
Class Participation	30
Formal Oral Presentation (Group)	100
Syllabus Quiz	30
Exams: Midterm & Final	200
	810

<u>Grading Scale</u>: A = (90 and above), B = (80-89), C = (70-79), D = (60-69), and F = (below 60).

Cheating & Plagiarism: Cheating in any fashion is not be tolerated, including but not limited to plagiarizing another's words, work or ideas on individual class assignments. To address the situation of plagiarism, the University has implemented *Turnitin* to fight plagiarism and improve reading, writing, and research skills. *Turnitin* is a comprehensive plagiarism prevention system that lets faculty quickly and effectively check all students' work. Results are based on exhaustive searches of billions of pages from both current and archived instances on the Internet. Plagiarism will result in at least a failing grade for the assignment(s) and/or course. Cheating of any kind is absolutely NOT allowed. Students caught cheating run the risk of losing several points to all the points allowable for that particular examination or quiz.

Attendance Policy.

Each Student is required to:

- 1. Attend class regularly on scheduled class days, unless there is a death in the family, or
- 2. the student is under the care of a physician. In either case, a signed excuse from the VP of Affairs is required.
- 3. Complete all assigned readings from course text.
- 4. Turn in each homework & worksheets on announced due date & time.
- 5. Demonstrate knowledge of course content on each examination.
- 6. TYPE ALL ASSIGNMENTS before submission.

Office Hours: The office hours on this syllabus are reserved for you. You should come in and ask questions on lecture or lab materials that you have not already mastered, or use the time to explore aspects of science, careers, academic advisements, etc., that may be of particular interest to you.

ADA Statement: MVSU is committed to providing reasonable accommodation for students with a documented disability. If you feel you are eligible to receive accommodations for a covered disability (medical, physical, psychiatric, learning, vision, hearing, etc.) and would like to request it for this course, you must be registered with the Services for Students with Disabilities (SSD) program administered by University College. It is recommended that you visit the Disabilities Office located inside the EMAP Computer Lab in the Technical Education (IT) Building to register for the program at the beginning of each semester. For more information or to schedule an appointment, please contact Mr. Billy Benson, Jr. via phone or email at 662-254-3005 or <u>billy.benson@mvsu.edu</u>

Tentative Course Outline:

Biology Seminar

08.24	Introduction and Academic Program Maps in NSEH
08.31	Intro of Concepts & Principles in Biology, Chemistry, & Environmental Health
09.07	Concepts and Principles in Biology, Group Presentation*
09.14	Concepts and Principles in Chemistry Group Presentation*
09.21	Concepts and Principles in Environmental Health Group Presentation*
09.28	Introduction to Environmental Health Program**
10.05	MT
10:12	Methods of scientific research
10.19	Components of Scientific Research/Paper
10.26	Components of Scientific Research/Paper continue
11.02	Components of Scientific Research/Paper continue
11.09	Components of Scientific Paper, Group Presentation [#]
11.16	Components of Scientific Paper, Group Presentation [#]
11.23	Components of Scientific Paper, Group Presentation [#]
11.16	Components of Scientific Paper, Group Presentation [#]
11.30	Components of Scientific Paper, Group Presentation [#]
12.06	Final Exam

*The class will be divided into three groups. Each group will research and do a formal MS Power point presentation on the assigned Concepts & Principles. Power point is to be emailed to the teacher at least one day (24 h) before the presentation. Each group should compose five multiple choice questions based on your presentation. The 5 answers should follow the last question. Your references should be put on the last slide.

**Write and submit a one half page summarizing *what you have learned from this presentations*. Your submitted paper should have a one inch margin, a title, a single line spacing with *Times New Roman font 10*, your name, class name, and a date of the presentation; the last three items must be placed on the upper right corner of the page.

[#]The class will be divided into five groups. Each group should select & review a research publication from one type of scientific journals (*Biological, Chemical, or Environmental*) and answer questions 1through 10 below, using a MS Power-point presentation.

What is the Research Title of the publication?
Is the title appropriate & justifiable? (Refer to H/O on how to write a scientific paper)
Re-write the Research Title, if it could be shorter & better?
What key questions are missing from the abstract? (Refer to H/O on how to write a scientific paper)
What are the objectives of the research?
Are the *Nature* and *Background* of the "problem" or research investigated presented in the Introduction? If so, what are they?
Is the research methodology chronologically presented?
What research Tools were used in the research you selected?
What result(s) was (were) obtained?
Is the research result(s) clearly reported in the result section of the publication? (Justify your answer).

As the instructor, I reserve the right to make any changes to this syllabus as found necessary. Further, this document does NOT constitute a contract with the University. It contains only guidelines for this course.