Effects of Climate Change and Harmful Algal Blooms on Freshwater and Estuarine Ecosystems EVPP 692/991 Spring 2021

Syllabus

Course Description and Goals: The goals of the course are: (1) to give students practice in synthesizing material from diverse sources and making oral and written presentations, (2) to develop an understanding of the current understanding of the climate change and harmful algal bloom impacts on aquatic ecosystems.

Course Content and Instructional Methods:

The first several weeks of the seminar will consist of presentations by the instructor and invited speakers giving an overview of the topic. During this period students will choose topics of interest to them within the general subject area and prepare a 30 minute presentation to be given to the class in the later half of the semester. Thus, the course content will consist of an overview by the instructor, special topics by guest speakers, presentation of an individual paper by students, and in depth presentations based on a synthesis of literature on a specific topic by the students.

Students will choose a presentation topic in consultation with the instructor during the first three weeks of the semester. A paper from that

Date	Topic and Speaker
Jan 28	R. C. Jones: Class overview and Introduction to the topic
Feb 4	GUEST SPEAKER or continued overview of topic Presentation Dates Requested Student Presentation Dates Submitted
Feb 11	Dr. Greg Foster, Chemistry and Biochemistry Dept & PEREC "Toxins Produced by Harmful Algal Blooms and Implications to Public Health Risks and Future Climate Change" Student Topic Proposals Submitted to Instructor
Feb 18	GUEST Speaker Feedback from Instructor on Student Topics
Feb 25	GUEST Speaker Deadline for submitting summary and preliminary reference list.
Mar 4	GUEST Speaker
Mar 11	Student Presentations on an Individual Paper

Mar 18	Spring Break
Mar 25	Students work on Presentation/Paper
Apr 1	Students work on Presentation/Paper
Apr 8	Students work on Presentation/Paper
Apr 15	Students work on Presentation/Paper
Apr 22	Student Presentations: First Group
Apr 29	Student Presentations: Second Group
May 6	Field Trip to Tidal Occoquan River
May 13	Papers are Due

Methods of Evaluation: Students are required to attend class and participate in discussions. All students must present a "topic proposal". The topic proposal should be a half page outline or abstract of the topic they propose with a reference list of 5 works that they plan to use in their presentation/paper. BIOL 692 students are required to give a 30 minute talk and present a 10 page paper on their topic including literature cited list of at least 10 journal articles or other academic literature. EVPP 991 students must also write a 20 pg paper (double spaced, 12 pt font) with at least 20 references to journal articles or other academic literature.

Instructor: R. Chris Jones

Professor, Environmental Science and Policy

Director, Potomac Environmental Research and Education Center

3114 Potomac Science Center

rcjones@gmu.edu

http://mason.gmu.edu/~rcjones

Office Hours: By appt., email for appt.

rev: 14 Jan 2021