**FRESHMEN JOURNAL CLUB SYLLABUS**

**FALL 2016**

My contact info:

Nicholas Palermo

Email: npale005@fiu.edu

Office: ECS 110

Office Hours: 9:30am-11:30am Friday

**Class Description**

The overarching goal of this class is to improve the confidence and efficacy with which students obtain and assimilate information from primary and secondary scientific literature. The class aims to promote skills that begin in the library, with the efficient location of relevant material, and extend into the classroom and eventually beyond, into a scientific community in which effective communication is every bit as important as science itself.

Journal club will take the format of weekly discussions of assigned readings. The class places an emphasis on students identifying the key concepts from articles and formulating questions with which to facilitate, and where necessary, lead discussions. As the semester progresses, the class will become increasingly student led. During the spring semester each student will be responsible for leading one class.

**Class Objectives**

* Students should **expand** their scientific vocabulary by compiling a list of words, from each article, with which they were not previously familiar. Students should **research** the meaning of each word, and **discuss** at least one listed word per week in class.
* Students should actively **facilitate** and **participate** in discussion in each class.
* Students should **advance** their writing skills and analytical thinking by producing a summary article of a paper written by a professor at FIU. The assignment should be written in the style of a New York Times science article.
* Students should develop their critical thinking skills by providing at least one discussion question by email before each class. Questions should relate to regular discussion areas including scientific concepts, experimental design, writing style, new ideas etc:

**Class rules and requirements**

1. *Articles*: Articles should be printed out, and notes taken on the hard copy.

2. *Quizzes:* closed book, during first 5 minutes of every class, will consist of a general question based on the reading, to be answered succinctly.

3. *Questions:* Come up with a discussion question relating to the reading. Questions should be emailed to me prior to each discussion class (by 5pm each Friday).

4. *Word lists:* write down and define every word from the readings that you don’t know the definition of. It is alright if not all your words are “science” words. Do not collaborate with others.

5. *Assignments:* There will be two assignments during the semester. These will be writing exercises, no more than 4 pages.

**Grading**

1. Grading scale: (A=90%, B=80%, C=70%, D=60%)

2. Grading breakdown:

Quizzes 25% (13 in total with the lowest score dropped)

Questions 10% (13 in total with the lowest score dropped)

Printing articles 10% (One amnesty week)

Assignments = 30% (Paper selection + 2 writing assignments: max 4 pages)

Discussion and participation = 15% (3 unjustified absences = automatic fail)

3. Quizzes and questions will be graded on a scale of 1-5.

4. I will not accept late assignments.

**What I expect from you in this class**

1. Print out and read the article.
2. Email a discussion question relating to the article
3. Compile a list of words that were new to you, along with their definitions
4. Come to class every week prepared and ready to discuss the readings for that week
5. Arrive on time so you can take the quiz

I will email you the readings and assignments each week, so check your inbox.

**Readings**

|  |  |  |
| --- | --- | --- |
| **Week of:** | **Topic** | **Reading** |
| Aug 22 | Introduction |  |
| Aug 29 | Immune system | (Fehervari and Sakaguchi 2006) Peacekeepers of the immune system |
| Sept 5 | Labor Day -No Class |  |
| Sept 12 | Cell communication | (Deratic and Klionsky 2008) How cells clean house |
| Sept 19 | Photosynthesis | TBA |
| Sept 26 | Mitosis/Meiosis | (Gibbs 2003) Untangling the roots of cancer |
| Oct 3 | Genes | (Ridley 1999) Genome: chapter TBA \* |
| Oct 10 | Gene expression | (Ridley 1999) Genome: chapter TBA \* |
| Oct 17 | Diversity of life | (Shubin 2009) Your Inner Fish \* |
| Oct 24st | Diversity of life | (Shubin 2009) Your Inner Fish \* |
| Oct 31 | Writing Class | (Gopen and Swan 1990) The science of scientific writing |
| Nov 7 | Population Genetics | (Wilson and Wilson 2008) Evolution for the good of the group |
| Nov 14 | Plant science | (Marvier 2005) Transgenic crops |
| Nov 21 | Ecosystems | (Collins et al 2000) A new urban ecology |
| Nov 28 | Conservation Biology | Kareiva vs Soule: a fiery debate |

\* This is a chapter from an excellent book (or so I’ve been told) that you may choose to purchase. Otherwise I will send out a pdf scan of the chapters which is not always ideal for some students.