Introductory Graduate Seminar
NUTR 694
Spring 2014

Instructor: James C. Fleet, Ph.D.
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Office: Stone G1D
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Time and Location: 
- Wednesdays, 11:30-12:20  REC 316 (Section 1)
- Thursday, 8:30-9:30  REC 316 (Section 2)

Office Hours: by appointment

Educational Goals:
A successful career in nutrition research will require that you be able to evaluate your scientific research and then communicate that information effectively to other nutrition researchers and health professionals. To do this you must be able to understand and organize information and you will then have to present that information in an interesting way. The fundamentals of effective public speaking are not difficult to understand. However, mastering those fundamentals requires practice. This course is designed to provide you with clear guidelines for effective oral communication of scientific and health information and an opportunity to put those guidelines into practice. Thus the educational goals for this semester are:

(1) To enhance your critical thinking skills;

(2) To develop and enhance your oral communication skills for presenting data to working scientists

(3) To enhance your ability to make effective visuals for presentations

Course Requirements:
You will create two scientific presentations: a 12 minute oral presentation and a poster presentation. These are the common modes of communicating primary research at scientific meetings. A detailed description of each assignment follows below. These are individual presentations but you will work in groups to get feedback on the quality of your presentations and to practice your presentations. This means that you will help each other to effectively utilize the presentation elements that we discuss in class. Group effectiveness is measured by the quality of the individual presentations and a brief report of the group assessment of presentations during a practice session.

Assignment 1: Choosing your topic.
You will work with your thesis mentor to select one research paper on a subject directly related to you thesis research. The paper must have at least four data tables or figures
(baseline demographic data does not count) – papers with more data are better choices. There are no restrictions regarding the scientific approach used for the papers (e.g. molecular biology, epidemiology, and clinical research are all equally acceptable).

Because I must approve the research paper, you will send two things to me by e-mail on January 22, 2013:

(1) a pdf of the paper (File name: Your last name_paper_NUTR694)

(2) an explanation of your rationale for choosing the paper (1 page, 1 inch margins, 1.5 spaced, 11 pt arial font: file name: Your last name_rationale_NUTR694).

You will present the data in the paper as if it were your own. The style of this presentation is that of a national science meeting. During sessions 3 and 4 we will work as a group to prepare a similar presentation using the following paper:


Read this and be ready to discuss this in detail by the THIRD class meeting (Feb 5).

Assignment 2: 12 minute oral presentation of a scientific paper

The basic format of the oral research presentation is: (10-12 slides total)
(I will provide a template – you can change the background)

I. Title (1 slide)
Provide a clear and concise title for your presentation. List your name, your degrees, and your affiliation (e.g. Ph.D. students: Interdepartmental Program in Nutrition at Purdue University)

II. Introduction (2 minutes/ 2-3 slides)
In this section you provide the background context for the research that will follow. You can assume that the audience already has a background in the subject area.

III. Hypothesis/Research Goal (1 min/ 1 slide)
This is a statement that explains why the study was done and what the experiment was attempting to show

IV. Research Design and Methods (Variable)
This is a summary of the experiments, their design and the methods used for analysis. If a single clinical trial is being conducted there may be several slides for this purpose. This would then be followed by the results (see next section). If several independent experiments were conducted, it may be more effective to show each one as a module (Methods-results 1, methods-results-2, etc). Regardless, unless the method is obscure, you must assume that the audience understands it and you will NOT describe the methods in detail (However, you must understand the methods in detail).

V. Results (Variable)
This is the most important findings of the experiments. You may need to be selective. You will probably have to reorganize the data into a format that is different from what is
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reported in the paper (e.g. you may need to convert a table to a figure, you may only want to report the effects that are statistically significant).

VI. Discussion (1-2 slides)
This is a summary of how the results relate to the hypothesis or specific aims. Relating the results to a model can be very effective.

VII. Conclusions (1 slide)
This is one or more statements that clearly reveal what you think the data means.

EXPECTATIONS AND LANDMARKS:

- I will expect to see a draft version of your presentation two weeks prior to your presentation date. This will account for 10% of the class grade.
  - This must have the structure of a presentation in place (i.e. the 7 sections from above).
  - You should have your title slide and hypothesis statement completed
  - You should have selected the data you intend to use and place it in the order you are considering.
  - One data slide should be a final finished version BUT you don’t have to have final versions of all the figures/tables.
  - You can place questions/problems in text boxes throughout the draft
- You must provide an electronic version of your presentation to me by 8 am the morning of your presentation date.
- You are expected to practice at least once with your group and receive feedback from them. (Recommendation: Do this one week prior to the presentation date)
  - I will expect a brief written report of your meeting with the group. This should include the comments that the group made and their suggestions for improvement. This can be handwritten but must be signed by all members of the group. (This will account for 5% of your final class grade)
- You are expected to practice on your own after you have made your final edits

ON THE PRESENTATION DATE: The 3-4 oral presentations will be presented each time we meet. We will conduct each session in the format of an oral session at a scientific meeting. You will be introduced by me, you will have 12 minutes for the presentation – a bell will sound at 10 minutes as a reminder that your time is ending. Afterwards we will have 3 minutes of questions from the audience on the topic of the paper.

After the presentation there will be a brief discussion of the presentation style by the group. This discussion will be based upon the presentation review form that you have been using for NUTR 695. It is intended to be constructive and professional.

Assignment 3: Creating a poster presentation for a scientific meeting

Poster presentations are frequently used in scientific meetings. They must both stand alone (i.e. anyone should be able to understand them without your help) and they must serve as the basis for a presentation of the material by you (i.e. as a guided tour through the information.)

Using the paper you selected, you will re-organize the material to create a poster presentation.
The same sections used above from the oral presentation are also used for a poster presentation. However, the level of detail and the style of presentation are distinct. For example, figure legends are used in poster presentations while they are not used in oral presentations. Also, more detailed methods can be presented in a poster because a person can choose to read them (or not).

We will discuss the format, use of text size, and use of color enhance a poster presentation. I will provide a template for you to use and I will arrange with the HHS poster printing facility to print your final poster.

When you have completed your poster, you will need to practice a 5 minute guided poster tour that highlights the important aspects of your poster. This is intended to help a reader rapidly see why they should be interested in the research. You should focus on:
- Why was the work done?
- What types of studies were done?
- What are the major findings?
- What is the major conclusion?

**EXPECTATIONS AND LANDMARKS:**

- **I will expect to see a draft version of your poster two weeks prior to the poster session.**
  - This will account for 10% of your semester grade.
  - This should have information in all of the sections
  - The title and hypothesis should be completed
  - You will use an edited version of the papers abstract for your abstract (i.e. you will NOT write a new abstract from scratch but you will need to remove information if you present only a part of the data)
  - Write a figure legend for a figure in the introduction and for one figure in the results
  - You can place questions/problems in text boxes throughout the draft

- **You must provide an electronic version of your presentation to me by 9 am the Monday BEFORE your presentation date.**
  - If you miss this deadline it will be your responsibility to find an alternative means of poster printing.

- **You are expected to practice at least once with your group and receive feedback from them. (Recommendation: Do this one week prior to the presentation date)**
  - I will expect a brief written report of your meeting with the group. This should include the comments that the group made and their suggestions for improvement. This can be handwritten but must be signed by all members of the group. (This will account for 5% of your final class grade)

- **You are expected to practice on your own after you have made your final edits**

**ON THE PRESENTATION DATE:** At the end of the semester we will have a poster session where you will post your presentation and students will examine and discuss the poster with you.

**Demonstration of Group Activity**
At the end of each session I will expect to see a written list of comments from the group that reflects the suggestions for improvement for each presentation that were provided by the group during a practice session. This can be handwritten or typed but must be signed by each person.
**Participation:**
Throughout your career, you will be expected to ask questions and speak up in seminar presentations. This class provides you with an informal environment for you to begin to test your skills in this area. Following the presentations and during the poster sessions, the class will have the opportunity to make comments about the presentation to help their classmate improve their presentation skills. The presenter can also ask questions of the class to help improve their presentation. These comments should be made in a professional and constructive manner.

You are expected to actively participate in discussions and question and answer periods following presentations. Presentations are not a one-way dissemination of information but are intended to be interactive. Active participation means (in part): attentive listening, respectful questioning of the presenter on confusing or controversial issues, suggesting alternative interpretations or pointing out discrepancies. When the discussion lags, expect that I will call on you to ask questions.

**Attendance is mandatory. If you need to miss a class, please speak with me. Unexcused absences will compromise your grade.**

**Grading:**

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**Policies:**
- Neither Purdue University nor this instructor discriminate on the basis of race, religion, color, sex, age, national origin, handicap, or disabled status.
- Dishonesty (cheating, plagiarism, or providing false information) will not be tolerated in this course and will subject the student(s) involved to disciplinary action and/or failure in this course.
- Discrimination, harassment, or intimidation of any person for any reason will not be tolerated in this class.