## LAB 10-16: Individual Project Development

## Psychology 120

LAB 10: Individual project, early topic	July 10	1
LAB 11: Individual	July 17	2
project, full design LAB 12: Individual	July 31	2
Project, data timeliness LAB 13: Individual	July 31	2
Project, analysis completion timeliness	•	
LAB 14: Individual project, final	Aug 5	3 + 3
presentation (materials		
+ oral) LAB 15: project, Others' evaluation &	Aug 5,7	2 + 2
Critique of others LAB 16: Individual project, final write-up	Aug 8	7

#### In the case of conflict, believe the schedule posted in the syllabus.

#### Tuesday July 8, 2014 Class Project Meeting #1 - Ideas for Research

- 1. Development of research idea
- 2. Discuss proposal requirements
- \*You should begin formulating a specific research problem, searching the literature for articles that are relevant, and thinking about how you wish to research this topic (i.e., the design/methodology) \*Consider the length of time you have to collect data, etc. when determining the method you want to use
- \*One proposal is required from each individual (short write-up due immediately, longer July 2<sup>nd</sup>)
- \* Do not do any experimental research yet

#### Thursday July 10, 2014

#### Individual Project Meeting #2 - Research Problem Discussion

- 1. Discuss proposal Design and Analysis
- 2. May include individual meeting with individuals on proposals and design drafts
- 3. more fleshed out proposal ("Part I").

#### Tuesday July 15, 2014 (LAB 11 due July 17) - PART II

With revisions, you should receive explicit approval (written) of final design on or before approximately July 18.

Individual meeting on proposals and design drafts.

Thursday July 17 (LAB 11) Final design due (i.e., be ready to run a single participant in each group) – you will not have to do so but you really ought to be 100% ready by July  $18^{th}$ 

#### **Thursday July 24**

**Initial in-class data collection (during lab time)** 

Use the data collection tool/instrument that you created to collect data on a small number of persons (e.g., 10-20). You are most likely to use your classmates for participants. Check with me to get approval before using any other population.

Participation is mandatory for all (albeit you can indicate to exclude your data and/or not answer any questions/surveys if objectionable).

## **Tuesday July 29**

# Final in-class data collection (during lab time) & data analysis assistance Individual Project - Data Collection

[Performance + appropriateness]

#### Thursday, July 31

### Individual Project - Data Analysis Workshop

Work on analysis of data collected [Performance + appropriateness] Individual Project – preparation assistance (if required)

#### **Tuesday August 5th**

Individual Project Presentations (your evaluations will be graded)

#### Friday August 8th

Full APA paper due (for individual project)

Title page, abstract, introduction, method, results, discussion, etc.

## **Individual Project - Part I (Proposal)**

Psychology 120 - Van Selst

This assignment should be two pages, typed.

Responses to items 1 and 2 should be on one page and items 3 and 4 belong on a second page. Do not forget to include a copy of the article.

### Individual Project Part I -- due July 11th

## **Introduction/Article Summary**

- 1. <u>Identification of research problem</u>: Select and briefly describe your research problem or question you want to address, and why you think it is important or interesting to study. (**Approximately 2 or 3 sentences**)
- 2. Review of previous research relevant to this topic: Select one or two research articles from the literature which relate to the research problem you wish to study. Select one article if you are working alone or two articles if you are working with a partner. Briefly describe:
  - (a) The hypothesis(es),
  - (b) Variables studied (identify the IV(s) and DV(s)),
  - (c) Methodology (participants, apparatus, and procedures) and
  - (d) Major findings.
  - (e) Be sure to include a copy of the article.
- 3. <u>Specify your specific hypothesis(es):</u> Make specific and formal statements about how you expect the variables to be related or what questions you expect to answer, and give your general predictions.
- 4. <u>Definition of Measures:</u> Be sure to indicate what variables you will be measuring and how you will measure them (i.e., **operational definitions**).

# Individual Project Proposal - Part II Methodology

Psychology 120 - Van Selst

## Class Project Part II due July 18th

A proposal addressing the following is required from each individual. This assignment should be typed, approximately 2 pages in length.

- 1. <u>Research Topic</u>: Describe your research topic and identify your hypothesis(es)
- 2. <u>Description of Participants</u>: Describe the sample you will use (who, how many, how will you locate them, how will you assign them to conditionsif applicable).
- 3. <u>Apparatus/Materials</u>: Describe the apparatus or materials you will use in your research.
- 4. <u>Design and Procedure</u>: Explain the experimental or qualitative design that you will use. Describe the process/procedure you will use to collect data.
- 5. <u>Development of Instrument</u>: Include the data collection instrument that you will use in your study. This can be a questionnaire, interview, or an observational tool, depending on the design you are using. As you create this instrument, pay careful attention to issues of operationalization, validity and reliability.
- 6. <u>Design Difficulties</u> Indicate any difficulties/obstacles you may have to work around (e.g., survey instrument unavailable, computer program modifications require a C-programmer, desired participants unavailable, etc.).
- 7. <u>Proposed Analyses</u>: Provide a brief description of the analyses you will conduct to determine whether your hypothesis(es) is(are) supported (e.g., correlation, t-test, 2x3x2 ANOVA)
- 8. <u>Novelty of Proposed Research</u>: How novel is the work proposed? Is it an exact replication of old research? A conceptual replication? Etc.

# Individual Project – Part III Final Design Approval

Individual Project Part III will take place before you collect data...

Tuesday Oct 20<sup>th</sup> hopefully, but definitely before Tuesday Nov 10<sup>th</sup> (lab) for any points

You are required to obtain WRITTEN approval from me before executing data collection. I can only give this approval when presented with the materials and methodology that you will actually use for your study.

# Guidelines for Project presentations [Thursday July 9<sup>th</sup>] Psychology 120 - Van Selst

The purpose of this component is to give students experience in communicating research ideas to their peers. The oral presentation will be a brief synopsis of your research: the theory behind what you did, what hypotheses you were interested in, the methods you employed, your findings, and a discussion of their implications and possible future directions. The particular advantage of live presentation is the ability to interact with the audience. During the presentation period, each individual will actively engage in presenting their own research as well as in understanding the logic and design of the work of others. Successful presentations are those that achieve both content coverage as well as clarity (i.e., the information is stated as succinctly as possible while conveying the important elements of the research).

COVERAGE - Have you provided all the obvious information? Will a casual observer walk away understanding your major findings after your presentation? Will a more careful listener learn enough to ask informed questions?

CLARITY - Is the information presented appropriate? It is presented clearly? Outlines and summaries are useful to assist clear communication. Keep it at a level appropriate for the audience. Place your major points in the presentation (it is ok to allude to other aspects of the data) and save the nonessential, but interesting side lights for informal discussions and the formal written report. Be selective. Your final conclusions or summary should leave observers focused on a concise statement of your most important findings.

PRESENTATION – be professional. Prepare an oral presentation or "walk through" of your research of no more than 7 minutes in length (but at least 4 minutes) and practice it in advance. Never read your presentation (cue cards are ok). It is almost unimaginable to give a research presentation without using audiovisual aides. For this assignment, use your .ppt as background and possibly provide a one or two page handout if your presentation would benefit from the audience having that resource.

# Suggested "framework"

- 1 slide: your name & project title
- 2 slides: background motivation / logic / prior research (cite sources!)
- 2 slides: methods (design, what did participants do, what manipulated, etc.)
- 1-2 slides: results
- 1-2 slides: discussion (include future research directions, revisions to design, etc.)

Your APA paper will cover the same topics but in much greater detail. Your APA paper will be due after the day of the final. You can use the feedback from your presentation to finesse your APA paper but a "preliminary" version of your APA paper should be available to me on the date of your oral presentation (not required, but a damn good idea).

Suggested "framework" [note that all projects are different so this is not necessarily the best fit for your particular project]

- APA Title page
- APA abstract for your project

- Introduction (1-2 doublespaced pages)
- Methods (1-2 doublespaced pages)
- Results (1-2 pages, include figure and/or table if >2 means, etc.)
- Discussion (bring back rationale from introduction, discuss findings; address limitations, application and future directions)
- References (you MUST cite appropriate sources from your introduction, etc.)
- Figures & Tables (as appropriate for your design)