UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

**School of Computer Science**

Computer Science Honours

Introduction to Research Methods

**PHASE 5**

**Research Hypotheses and Methods**

Vashti Galpin 2005

Revised by Maria Jakovljevic, 2014

**1 Aim**

The aim of this phase of the IRM topic is give you more experience with research questions, research hypotheses, research methods and presentations. This will be accomplished by presenting a hypothesis and the methods that you would use to test this hypothesis.

**2 Instructions**

1. The aim is to develop a focussed research hypothesis from the topic and then decide how testing of the hypothesis should be accomplished. The scope of the research should be sufficient for an Honours research report. You may also assume that the background literature has shown that the question is still “open” and worth pursuing the background literature has given you insights into the problem. You may also make any other assumptions you like to make the problem a reasonable one to tackle.
2. You must give a 10 minute presentation. You will use a data projector for the presentation. Time for questions will be given after the 10 minutes.
3. Your presentation should cover motivation for the research, assumptions, the research hypothesis and how you would test it including any data or measurements to be collected and their relationship to the hypothesis. It must be clear how your proposed research differs from the original paper, and it is not acceptable just to repeat the same research.

I suggest you consider what would be in a research proposal. You should be covering everything except related literature, and you should include a list of deliverables and a timeplan. More information about timing will be given. You can also look at the referee’s guidelines from Phase 3 to get an idea of how your proposal will be evaluated.

1. The presentations will be given on xxx. The exact times will be announced later. The presentation schedule will not be announced until the start of the presentations. Attendance at all presentations is compulsory unless you are involved in a tutorial or laboratory. If you have tutor duties during a session, your presentation will not be scheduled for that session and you will be excused.
2. A few members of the class will be chosen to chair sessions which involves introducing the speakers and handling questions. Everyone will be expected to ask at least two questions of the speakers during the course of the presentations.
3. If you do not know how to go about tackling this exercise or you would like some advice or suggestions on what you are doing, feel free to see/e-mail me.

**3 Preparation of slides and submission deadline**

Your presentation must be submitted by 10h00 on Tuesday xxxx. Include a PDF version of the slides and all \*.tex and \*.bib files. The presentation of slides will be done by data projector, so check that your slides look reasonable when using full-screen mode in Acrobat.

**4 Assessments**

This task count 16% of your final mark for the topic, and you will be marked both on the form and content of your presentation. You will use feedback from this phase for Phase 6.

**5 Time Usage and Planning**

You will have 20 hours for this task. This should be more than enough time if you plan accordingly. Do not leave everything to the last minute. Additionally, approximately 3 hours are required for attending presentations on xxxx.