Psychological Research Laboratory

I) Course Information

Course number: PSYB01H3

Mondays, 5 pm – 8 pm
Section: L30 2004 F – and – L60 2004 F
Place: SW 361 – or – online

Prerequisites: [PSYA01H & PSYA02H] or (PSYA01Y)

II) Instructor:

Dr. Matthias Niemeier
1266 Military Trail S572
phone: 416-287-7466
e-mail: niemeier@utsc.utoronto.ca
Office Hours: Wednesdays, 3 pm – 5 pm and by appointment. Contact me by e-mail to set up a time.

I received my MA at the University of Hamburg (Germany) and my PhD at the University of Tübingen (Germany). From October 2000 – June 2003 I’ve been working as a postdoctoral fellow at UoT’s Department of Physiology. Since July 1st, 2003 I’m an assistant professor at UTSC.

III) Teaching Assistant:

Miriam Wynberg
e-mail: psyb01@utsc.utoronto.ca
Office hours: TBA

IV) Questions

For questions other than about appointments please email Miriam (psyb01@utsc.utoronto.ca). If there is something I should have a look at too she will forward your email to me.

V) Course coverage and goals

In brief, PSYB01 aims at introducing you to “the scientific method”, specifically those techniques used in psychological research. The course has two goals. The first is to provide you with the skills that you will need to understand and evaluate the research that is / has been done by other people, as well as the basic abilities that are necessary to conduct your own research. Therefore, we will look at which are the tricks that good researchers use and which traps do they avoid. The second goal is more general and it concerns critical thinking, not taking everything for granted what other people claim. I am convinced that you already have a good portion of critical thinking, but I believe this course still may contribute to that. In this way, the course is not (only) meant to prepare you for becoming a professor of psychology – I guess, only few of you are interested in that. – The idea is that you will be able to apply your new knowledge in daily life. You
may or may not have noticed that we are more and more confronted with information, correct and incorrect. To sort out which is which, this course will help you.

VI) Textbook

Required

Title: Psychological Research. The Ideas Behind the Methods.
Authors: Douglas G. Mook
Publisher: W W Norton & Company: New York
ISBN: 0-393-97620-3

VII) Web pages

Intranet: All materials will be available via the intranet. Also, please check on a regular basis for announcements. Go to https://intranet.utsc.utoronto.ca/home.php?login=1.

Course Web Site: http://www.utsc.utoronto.ca/~niemeier/teaching/PSYB01/

VIII) Evaluation

40% Mid-term test. Scheduled for TBA. Two hours.
60% End of Term test. Scheduled for TBA. Two hours.

Material on the exams will include both lecture material and text readings. Although the topics covered will largely overlap, different things may be emphasized in class than in the book. Therefore, class attendance is highly recommended. E.g., you need to come to class to hear the details and see videos and demonstrations. The text is intended to reinforce and supplement material presented in class.

IX) Exercises

During the course I plan to have a couple of exercises. These exercises are NOT assignments – in other words it is up to you whether you do them or not. – Hang on! – Needless to say that I strongly recommend doing them. The exercises are meant as learning aids, and to help you to apply your knowledge in a more practical way rather than filling in multiple choice scantrons. Also, you can get some feedback on how well you understand the course materials. Though I am positive that this already convinces you entirely, here is another reason for you to do the exercises: Sometimes the exams will come back to what you will have learned from the exercises.
X) Schedule

This schedule is subject to changes as we go along. The most up-to-date schedule will be on the web.

<table>
<thead>
<tr>
<th>Day</th>
<th>Topics</th>
<th>Chapter(s)</th>
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</thead>
<tbody>
<tr>
<td>13 Sep</td>
<td>Welcome and Introduction; Testing our ideas</td>
<td>1</td>
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<tr>
<td>20 Sep</td>
<td>Theory and data in psychology</td>
<td>2, 3</td>
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<tr>
<td>27 Sep</td>
<td>Observation and description</td>
<td>4</td>
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<tr>
<td>4 Oct</td>
<td>Observation and description II; some technical problems</td>
<td>5</td>
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<tr>
<td>11 Oct</td>
<td>Thanksgiving Day, no class</td>
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<tr>
<td>18 Oct</td>
<td>Experiments with one independent variable</td>
<td>6</td>
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<tr>
<td>TBA</td>
<td>Mid term test</td>
<td>1-6</td>
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<tr>
<td>25 Oct</td>
<td>Experimental control I: obscuring factors</td>
<td>7</td>
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<tr>
<td>1 Nov</td>
<td>Experimental control II: confounded variables</td>
<td>8</td>
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<tr>
<td>8 Nov</td>
<td>Experiments with more than one independent variable</td>
<td>9</td>
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<tr>
<td>15 Nov</td>
<td>Single-subject and &quot;small-n&quot; experiments</td>
<td>10</td>
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<td>22 Nov</td>
<td>Quasi-Experiments</td>
<td>11</td>
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<td>29 Nov</td>
<td>The reliability and generality of findings</td>
<td>12</td>
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<td>2 Dec</td>
<td>Ethical considerations in research (note that this &quot;Monday class&quot; takes place on a Thursday)</td>
<td>13</td>
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<tr>
<td>TBA</td>
<td>Second term test</td>
<td>7-13</td>
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XI) Course Policies

For academic regulations (such as UTSC’s official grading practices policy, petitions, code of behaviour on academic matters etc.) please refer to the UTSC calendar.
A wide range of research methods are used in psychology. These methods vary by the sources from which information is obtained, how that information is sampled, and the types of instruments that are used in data collection. Methods also vary by whether they collect qualitative data, quantitative data or both.

Qualitative psychological research is where the research findings are not arrived at by statistical or other quantitative procedures. Quantitative psychological research is where the research findings are arrived at by statistical or other quantitative procedures.

Research Methods: The Basics is an accessible, user-friendly introduction to the different aspects of research theory, methods and practice. Structured in two parts, the first covering the nature of knowledge and the reasons for research, and the second the specific methods used to carry out effective research, this book covers:

- structuring and planning a research project
- the ethical issues involved in research
- different types of data and how they are measured
- collecting and analysing data in order to