Welcome to the psychology honor’s program. This course is designed as a mini tour through the field of psychology. Where did the field come from? How did the field mature into the subdisciplines that we have today? What counts as evidence in psychology? What methods do we use to secure the evidence and why? Finally, how do we build a base of understanding about the human condition?

This semester we take on a new and growing area of study – the digital you! This semester we will ask about your ability to multi task while you are writing or driving. We will look at how you represent yourself through avatars. We will learn about robot teachers on the frontier of education in Korea, robot therapists who were defined in an October 8, 2012 New York Times piece as apps that put a “therapist in your pocket” and even robot nannies. We will probe whether there are any advantages to the new digital technologies for learning. Are you ready? The materials you are about to read are recent. The field is new. Your job will be to link our discussion of methods in the Tuesday class with this burgeoning field so we can not only talk about the new digital advances and explore their psychological effects, but apply what you learn to this new frontier of study. Now is the time for you to decide whether the digital age is “why kids are getting stupider” (Philadelphia Magazine, December 2010). Is your future profession among the “70 percent of today’s occupations will likewise be replaced by automation” (Marcus, 2012)? By the way, did you catch the top 10 scientific ideas from 2012? Among them were the findings that inserting a chip in chimp brains made them smarter and that cars roaming the streets without drivers are now legal in a number of states! Fasten your seatbelt.

In the first semester, we addressed questions about the human condition by examining several techniques in experimental design and by seeing these in action as we explored the area of prejudice within the context of the true experimental design.

This semester, we revisit some of the methods we studied with a new eye. As noted last term, our methodology has in large part been shaped by reliance on lab research, assumptions of truth and thus on the golden temple of true experimental design. This semester we add to our methodological arsenal. Moving beyond the classic experimental design, we investigate the ways in which the true experimental design was altered to meet the demands of real world research. Starting with a review of the true experimental design with its emphasis on prediction and control, we enter the “dark side” of quasi-experimental design – through observation, questionnaires, survey research and naturalistic designs. In short, we enter the messiness of the real world. We ask whether it is possible to learn about the human condition scientifically while still preserving ecological or face validity. What we will see as we read these articles is the struggle we face in psychology between the cleanliness of lab design with its ability to isolate one factor for study and some of the “chaos” of the real world in which multiple factors often define who we are and how we will behave. Even our virtual selves live in a complex world in which defining the one critical variable will be difficult. In a sense, this is the same struggle that
we read about in the first term when the logico-mathematical scientist met the romanticist and narrative scientist in the Bruner article. As before in our study of prejudice, we are about to enter into uncharted domain and to re-examine the assumptions we bring to the study of psychology. We will ask about the optimal method – or in this case, methods – that the scientist can bring to bear on an issue so central to our human existence and so woefully underexplored within the scientific arena.

The class is organized as two classes in one. The Tuesday meetings offer a basic course in research methodology demonstrating classic and new designs that allow us to make progress across all of the subdisciplines within psychology. On Thursday we will sample some of the articles that illustrate these methods within the context of the digital you. We will read articles, evaluations and even a case study on the use of cell phones, social networks, television and phone applications. I hope we will also notice how we frame our discussions. What questions does science deem to ask? Are these the right questions to ask of technology?

Finally, we end the course with reflection. In the new age of psychology, we can ask what our science of psychology looks like, how it is changing and whether psychology can become united by a common foundation based on philosophical and methodological choices about how to best study the factors that make us human. Indeed, we will see that there is a new movement afoot that celebrates more complex interdisciplinary studies within the context of what the APA Monitor has called Big Science.

All 2991 and 3991 students must attend both the Tuesday and the Thursday lectures/discussions. 4991 and 4996 students must attend the Thursday classes. These students also become the elder statespersons who will be there for research and social support.

Requirements:

Class Meetings: The class meets on Tuesdays and Thursdays from 11:00-12:20 in Weiss Hall 711. Students are expected to attend all classes and to have the reading assignments and paper assignments completed before the start of class. “Juniors” (2991/3991 students) attend both Tuesday and Thursday classes. “Seniors” (4991/4996 students) must attend the Thursday classes. The syllabus that follows has both Tuesday and Thursday reading assignments.

Blackboard: Everyone must use Temple e-mail accounts to participate in this course. When you register for the course, you will immediately become a member of the class listserv account and will be eligible to look at the class blackboard. You access blackboard by going to tuportal.temple.edu and by clicking on blackboard. Once you reach this site, you will need to enter your user name and your password. This then gives you access to this class on line. For the syllabus, goals, end-of-semester evaluation forms and philosophy in the course, look at the buttons on Blackboard under “Course Information.” Under the button labeled “Content” you will find electronic copies of additional readings. Under External Links, you will find other websites useful for your studies. Finally, the journal synopsis forms appear under “Assignments.”

Discussion postings: All discussion comments or questions from the upcoming Thursday class are to be posted the Tuesday before class (by 8 am) to assist the discussion leaders for that week. This means you should read the Thursday material by Tuesday morning to post provocative questions and
comments. This posting and familiarity with all class postings will be considered in your class participation grade.

**Discussion leaders**, please email your questions for the discussion by Wednesday night at 5pm to Kathy & Jessa. All students will participate as discussion leaders for particular weeks. All are expected to be familiar with the articles, but discussion leaders should dive in more depth by gathering additional relevant information about the day’s topic (articles, news, etc) as they prepare to lead the class.

**There are required texts for this course:**

**Highly Recommended (especially for those unfamiliar/need refreshers on APA style):**

**Grading:** JUNIORS will have a midterm, a final and two journal synopsis papers for this class. Class participation is central. NOTE: SENIORS will be graded both from your advisor and for class attendance and participation.

- Midterm: 25%
- Final: 25%
- Paper 1: 15%
- Paper 2: 15%
- Class participation: 20% for all students

**Important:** Now that 2991 is recognized as a writing intensive course it is imperative that you not only write, but expect to rewrite all paper assignments until they are excellent samples of scientific writing.

**Note:** Honors is a program that is by invitation only. Students must maintain a 3.5 cumulative average to stay in the program. Further, if for any reason student performance is deemed unacceptable with respect to class requirements or to lab requirements, they can be asked to leave the program.

**Reaching me:**
My office hours are from 12:45 to 1:30 in 316 Weiss Hall after class on Tuesdays and Thursdays and by appt. I can also be reached by phone at my office phone, 215-204-5243 or at my lab phone in Ambler 267-468-8610. My e-mail address is khirshpa@temple.edu. Jessa will be available on Tuesdays from 9:00-10:30am in 566 Weiss Hall. Her email address is jreed@temple.edu.
Note: The syllabi, forms for assignments and some interesting links to others sites can be found on blackboard and on my website - http://astro.temple.edu/~khirshpa/

Disability Statement:
Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible.

Statement on Academic Freedom: Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link: http://policies.temple.edu/getdoc.asp?policy_no=03.70.0
Week 1
January 22: Introduction to the class
- What science can and cannot address
- The Matrix and beyond: Questions of reality vs constructed reality
- Where knowledge about the human condition meets science
- Expectations: What makes honor’s students special
  Reflection, inquisitiveness, active thinkers not passive learners
- Where you should be if you are in 2991/3991/4991 & 4996
- The Tuesday course outline

Reading:

January 24: Your digital self
Psychology arises in the most unexpected contexts. Indeed current news stories often frame our operational definitions. Just what is your digital self? How might we begin to define it? If we want to study it with a scientific lens, then our first job is to know definitively what it is. But that, we are about to see, can be a challenge. Our digital experiences include everything from watching TV to heavy computer use on social networking sites like Facebook and Twitter. The research suggests that while there might be some advantages to being wired, there are also some real disadvantages. We will decide throughout the course of the term. Today, we introduce the topic by posing the question that was first articulated in the December issue of Philadelphia Magazine: Are kids getting stupider? The article hypothesized that it has something to do with increasing reliance on technology. Hmm. Do you agree or not? We will use the term to explore many facets of this question in many different methodological ways. I think you will see that the bold and controversial claim made by Philadelphia magazine requires a nuanced approach. We will also read two pieces about the way in which digital robots are about to take over the jobs you are preparing for. Oh no!
- Introduction to our main theme
- Expectations
- Where you should be if you are in 2991/3991/4991/4996
- The Thursday course outline
Readings:


**Week 2**
**January 29: Reviewing assumptions behind the true experimental design.**
Last term we discussed the Temple of the true experimental design – a beautiful monument brought to us through John Stuart Mills’ necessary and sufficient conditions, randomization and the desire to find truth and cause. Is this the pinnacle of science that will teach us about the human condition? Why or why not?

Reading:
Rosnow & Rosenthal, Chapter 7

**January 31: Driving you to distraction?**
Two years ago, Philadelphia introduced a new law banning hand-held cell phone use while driving. Why? The research could not be clearer. You just cannot pay close attention to the road while you are talking on the phone or texting. Amazingly – even though you think you are great multi-taskers, the readings we have for today suggest that you are not so skilled at multi-tasking. Here we examine the research on both cell phone use and the relatively new texting-while-driving studies. Take a look at this simulation: [http://video.msnbc.msn.com/rock-center/50423017#50423017](http://video.msnbc.msn.com/rock-center/50423017#50423017) and look over the Jan 8, 2013 report on Brian Williams’ Rock Center Report [http://rockcenter.nbcnews.com/_news/2013/01/08/16327254-texting-drivers-involved-in-serious-and-fatal-crashes-get-slap-on-the-wrist-say-victims-families?lite](http://rockcenter.nbcnews.com/_news/2013/01/08/16327254-texting-drivers-involved-in-serious-and-fatal-crashes-get-slap-on-the-wrist-say-victims-families?lite) Read and weep at what we found in these true experimental designs.

Readings:


Optional:

Rabin, Roni (November 9, 2010). Behavior: Too much texting is linked to other problems. *New York Times*  


**Week 3**  
**February 5: Reliability and Validity**  
Cornerstones of all research, reliability and validity ensure that what you see is what you get. They are key research concepts that allow us to have confidence in our findings. But how do we reach adequate levels of reliability and validity – especially when so much can go so wrong even in the contexts of true experimental designs. In this class we examine reliability issues that we face when we do experimental lab designs and contrast that with some of the issues we face when we look into real world practice with digital media. What are the advantages or disadvantages of being in a lab or being in the world. How might we design our projects so that they are sensitive to issues of reliability or validity?

Reading:  
Rosnow & Rosenthal, Chapter 6

**February 7: The promise of high tech**  
Studies are just streaming in and as of yet, there is not a huge literature on the effects of digital media on studying, learning, health, etc. What we do know is that with more facts at our fingertips, we are seriously more informed than prior generations. Wiki itself was a huge boon in that direction as was google and yahoo. The question before us is how we might do reliable and valid studies of the digital media world that could answer our basic questions. In 2007, Bainbridge asks just this question in an article that appeared in the journal *Science*. Platoni’s tag line is: “Maybe virtual reality isn’t just a game any more. Maybe it is a way to build a better you.” What do you think?

Readings:  


**Week 4**

**February 12: Statistics: A partner in design**

Methodology and statistics are often divorced in the ways we present them to students. Yet, they are intricately tied to one another such that a choice in design is also a choice in statistical analysis. This class reveals the partnership between the two and demonstrates how one can plan statistics while also planning the methodological component of our experiments. How do our statistics flow from the designs we choose?

***Your first journal synopsis is due today. Please read the article and make sure you bring your assignment to class. Your synopsis should be written about the Emberson article below.***

**Readings:**
Rosnow & Rosenthal, Chapters 13 & 14


**February 14: It’s complicated**

Looking seriously at some of the questions in virtual reality and use will require a careful look at the kinds of scales we use to test digital information and at the statistics we use to examine our effects. Today we look at two cases in which more complicated statistics and analysis. One examines whether you become more civically involved and politically knowledgeable when you use social networks like Facebook (Pasek, 2010). The other examines the case of internet addiction and the ways we need to study it. I will give a short piece from Pasek 2010 on social networks and the class will then lead the discussion on addiction.

**Readings:**

Week 5
February 19: Quasi-experimental designs
   The first step in the transition to the real world involved abandoning the requirements for true random designs. One cannot randomly assign some people to poverty and some to drug use, or to artistic talent and artistic opportunities. Thus, to study the effects of real world contexts of behavior, we needed a new model that preserved scientific integrity. The quasi-experimental design offered the solution.

   Readings:
   Rosnow & Rosenthal, Chapter 8

February 21: A positive spin: Introducing the digital teacher
   Well, the world is changing and maybe you don’t need us anymore (didn’t Skinner suggest classrooms should all be more routine and we might take the teacher out?). Believe it or not, in Korea and other countries they are using Robots as aids in classrooms. Take a look (http://www.nytimes.com/2010/07/11/science/11robots.html) and their government invested 9 million US dollars in 2011 to make this happen. We are also checking the possibilities of using robots in early childhood classes to bolster vocabulary and holograms to help our autistic children. REALLY???? Yep. Finally, you just have to see that new Verizon commercial on robots that bring you to class even when you are not feeling well: http://www.ispot.tv/ad/7wsf/verizon-powerful-answers-class-attendance. That’s today’s discussion. Can you tell why these are quasi designs?

   Readings:


**Week 6**

**February 26: Qualitative Research**

Case Studies, Diaries, Ethnographies and Protocol Analyses are among the ways we first explore the research terrain. These methods allow us to probe an area and to derive the interesting questions based on the contexts and running commentary of our participants. While these methods have great utility for getting our research started, they have often been criticized as less scientific than the more quantitative methods of research. In this class we do a survey of these methods along with their strengths and weaknesses.

Your midterm examination will be available today after class. This is a take home, open–book exam. Please complete the exam and upload it onto blackboard by March 3, at 5 pm.

Readings:
Rosnow & Rosenthal: Chapter 4s & 5

February 28: Gaming
Readings: Digital learning as a way to transform educational practice
Even in our honor’s classes we see the use of digital media as a way to augment what we are learning. Do the You-Tube videos enhance our learning? Might we learn even more if we had games the allowed us to master the principles of research design or statistics? Today we look at a few case studies that are asking how digital technology might change the look of school classrooms and even of schools themselves. Take a look at the curricula for the Quest to Learn School in Manhattan and see whether you think this can work as a successful model of education. Why or why not? Don’t forget to look over the curricula (http://q2l.org/) and the Kahn Academy (https://www.khanacademy.org/).

Readings:


**Week 7:**
**March 5: Observational Methods: An overview**
Can we really observe behavior without bias? Without being obtrusive? In this class we learn how seemingly qualitative research takes on a quantitative flavor. How do we get “clean” observations that are untainted, reliable and valid?

Readings:
Rosnow and Rosenthal, Chapter 4

**Journal synopsis 2 is due today.**

**March 7: An in class project**
Today I want you to go back to your cell phones. Jessa Reed in our department is embarking on a study of cell phone use by parents. There are a couple of ways in which cell phone use by parents might invade the parent-child relationship. It might change the emotional valence of the conversations or it might break the thread of fluid speech that is characteristic of normal conversations. I bet this is also true of natural conversations that we have on a day to day basis. Yet, there is no research in this area.

For today’s class I ask that you spend the 5 days before class collecting data during meal times. How often do you get a call or a text? Pls write down the number of times per each meal. In what ways do these calls or texts intrude or buttress your conversations or those of others at the table?
Also please observe another table or go to a restaurant and check out the cell phone use at another table. What did you see? What might we observe and what would the worthwhile categories of observation be if we were to frame an interesting psychological question in this area.

**Week 8: Spring break (write us from someplace warm)**

March 12: No class: Spring break

March 14: No class: Spring break

**Week 9**

March 19: Questionnaires and survey research

The structured interview begins to resemble a questionnaire. And questionnaires are used widely to get a lot of information quickly. Not only are they used to get a lot of data from one participant in a study, but also to broadly poll a large number of participants so that we can better take the temperature of a society on a burning issue. How often are arts classes offered in the US? What is the performance of students in different ethnic groups or at different ages? If we do not understand the structure behind the questionnaire, we might fail to ask the right questions in the right way – we might not meet conditions for validity and reliability. Today we examine the structure behind the questionnaire. On Thursday we look at several examples of large-scale questionnaires that give us a picture of arts education and its impact.

**Readings:**
Rosnow and Rosenthal, Chapter 9

March 21: Survey methods in the digital world

The Kaiser report you are about to read (or hear about) in this class will shock you. Seriously, most of you are spending more time than you would in a full time job in front of a television or video or computer. And that does not even include the time you spend on your cell phone or texting! UGH! What are these surveys telling us and what might they portend for television and internet use in the future? For the Rideout, if your last name begins with A through H, read the report; J through P (see the powerpoint); Q through Z, watch the podcast. All links are noted after the report below. One final piece speaks directly to use patterns in teen research. See if the results of the Pew survey ring true and whether you think the concerns raised are valid. This is a very new study that we have a chance to evaluate in class.

Reading:


Check out the survey questions used for this report at:
Week 10
March 26: Self report Methods – Interviews
A powerful way of getting data from people is to ask them directly. But how do we ensure that we are not biasing their responses? What questions CAN we ask? In this class we explore the techniques designed to help us get the best information from informants in a way that is unbiased and unintrusive. We look at the results from some interview data that is highly structured to semi-structured to unstructured. You will also become a diagnostician.

Readings:
Rosnow & Rosenthal: Chapter 5

March 28: Optional Digital media across gender, race, culture and age
Not all groups are created equal. And not all will use digital media in the same way. Today we look at research suggesting that in lower income neighborhoods, for example, cell phone connectedness is more prevalent than broad band computer access. We also have an aging population. Are they as likely to go to Google as you are? And what are the consequences of the new age in blogs, Google, Facebook. How is this changing the landscape in how we get information and dialogue about the issues of our time? Would you believe that mobile phones came in just before you were born, that Google is only 14 years old, that Facebook in only 8 years old, that the iPhone was introduce in 2007 and the iPad came into vogue in 2010 when you had already entered college? Obama was the first presidential candidate to use Facebook? How is this affecting the masses and do different folks use the information in different ways?

Readings:


Week 11:

April 2: Big Science, Part I
What we have seen throughout the term is that psychology poses complex questions and that these questions can be answered through a number of different methodological choices. In fact, current trends are to use multiple methods and to generate huge data sets to get a fuller picture of the human condition. In developmental psychology, this trend was best articulated by Uri Bronfenbrenner a giant in the field who worked in the area of applied development. His theories sparked a huge study of child care called the NICHD Study of Early Child Care and Youth Development that we will discuss today. After exploring this one case in big science we take next week to explore the consequences of BIG science for our field and discuss the ways in which BIG science are leading to questions of interdisciplinary research and secondary data analysis

Reading:

April 4: Presentations

Week 12:
April 9: Big Science, Part II
Last week we looked at one of a growing number of studies that generate massive amounts of data to address an issue from multiple measures and multiple perspectives. BIG Science brings with it several changes that are becoming more commonplace and that raise a number of interesting issues about the field and about ethics within the field. We discuss those today. By way of example, with secondary data analysis, you need not collect your own data but rather use already collected data of multiple investigators and reanalyze that data to address questions of psychological interest. This kind of science is gaining ground. Recently, there have been calls to create a digital video base for researchers who want to reanalyze context-based behavior in home and schools. There is also a movement in the field of neuroscience to store images of brains collected from a number of studies and a number of researchers so that new scientists can reanalyze the data to investigate new and enduring questions. Note, however, that this kind of research also has its risks. If you want to use the data set from the NICHD study we investigated, you will be getting data from the 1990s. Would that alter your interpretation of the findings? If so how? Remember that Bronfenbrenner spoke about chronology as a key contextual factor in research. And what about the ethics? If those in the developmental literature share video tapes – how do they protect the human subjects and how will neurologists give other scientists enough background knowledge while protecting the identity of the patients. Let's take a peek at the plusses and minuses of big science and at secondary data analysis with an eye towards the
risks and benefits of this new approach. Let’s also ask how the use of Big science is likely to change the very nature of research in our field.

Readings:


April 11: Presentations

**Week 13**
**April 16: Progress reports**

April 18: TURF
There will be no class today as we expect all students to attend the TURF Undergraduate conference. Unfortunately, Jessa and I will be out of town that day in Seattle for the Society for Research in Child Development International Conference. Thus your support for your fellow students is even more important.

**Week 14**
**April 23: Putting it all together**
Traditional research has used one method to the exclusion of the other. Lab-based research is used or qualitative methods. Yet, we are in the dawning of a new age where many are beginning to look across disciplinary and methodological boundaries to take a fuller and more complete look at complex behaviors. As we have seen in our study of the digital you we will need to invoke multiple methods to fully understand a complex process and to better understand how the technology and the way it contributes to our understanding of the human condition. I hope these early articles in the study of the digital you also prompt us to ask how we are changing technology and it is changing us. Today we ask about the methods we use
to study complex behavior and how a cornucopia of methods might enable a fuller picture of human behavior in the era of the “knowledge worker”. We also ask whether psychology is now ready to embrace multifactored approaches that go beyond the true experimental design. In what ways might adherence to strict experimental designs strangle us and in which ways will our traditional approaches allow us to build a window onto our understanding?

April 25: Presentations 4991/4996

Week 15
April 30: Wrap up on methodology. Preparation for the final exam.
Breathe in. Breath out. Today we review the term and the main themes and ask about how the digital you helped you better understand the nature of various designs while also suggesting the move towards a big science that looks at both group data and individual difference data.

*Take home final exam will be available today and must be turned in at the poster session on May 7.

May 2: Wrap up of main theme: Are we amidst a change in the field?
The world is changing. In the digital you, we experienced this up close and personal. What did we learn and what do we wish we had studied? How might this interdisciplinary study of robotics, technology and humanity change the way we think about psychology? What kind of perspective does it give us on our field? Today we reflect on the term and enjoy our class party. I also could not help have us read two more pieces that are only a little futuristic. One comes from historian and futurist Sherry Turkle where we read her introduction and then her chapter 6 on robotic nurses. Yes – on robots who can show empathy as they care for the elderly. We also take a peek at the possibility of robot nannies. Would you leave your child with a robot?


Week 16
May 7: Poster Session in 6th Floor Weiss Hall 11-1:00
Join the seniors as we celebrate their posters and have a department wide party! All 4991 students must report by 10:30 to display their posters.

*Please make sure that your advisors have a copy of the evaluation forms that must be returned to me by May 3rd.