TIER 2

Creativity in the 21st Century Economy: Pitching Your Projects as Branded Content
(1 Credit) ITPG-GT.2781.1 Call#20951  Sat 11/14 1:00pm to 6:00pm  Michael Rosenthal
Sat 11/21 1:00pm to 4:45pm

Traditional advertising is dead. Brands have realized that in order to succeed in the 21st century they need to be associating themselves with cool content rather than hoping people stick around for the ads (they don't). As such there is a growing opportunity to have brands pay to be associated with your tech savvy, creative media project. In this class we'll do an overview of this emerging field, discuss some of the different approaches and what typical deals tend to look like, and then dive into your specific projects and discuss ways you can be presenting your work to brands and agencies. This class will take place on two subsequent Saturdays. You should come prepared with an existing project you want to work with. During the week between classes you'll be expected to prepare both a written and verbal pitch, both of which you will present on the second Saturday to the class and special guests from the industry for feedback. This one-credit course will meet on Saturday, November 14 from 1 p.m. to 6 p.m. and Saturday, November 21 from 1 p.m. to 4:45 p.m.

Mapping Systemic Relationships
(1 Credit) ITPG-GT.2739.1 Call#20952  Sat 11/7 12:00pm to 6:00pm  Howard Silverman
Sun 11/8 12:00pm to 2:45pm

Systems thinking is relational thinking, and the best way to understand systemic relationships is to map them out. In this class we will develop, discuss, and compare a range of mapping (i.e., diagramming) techniques, such as: social ecosystem mapping, analog mapping, concept mapping, causal mapping, influence mapping, and scenario mapping. We will use these mapping techniques to examine social and environmental issues, and the resulting maps will inform our conversations as we consider and critique strategies for effective engagement. No explicit familiarity with systems thinking is required; this class will serve as both introduction for newcomers and augmentation for old hands. Students will work individually and collectively to apply mapping techniques to case studies (provided as text, audio, video) of social and environmental issues. These mappings will challenge students to articulate and clarify both their understandings of complex situations and their hypotheses about affecting change in areas of concern or opportunity. Throughout the course, hands-on exercises will be woven together with introductions to relevant systems theory and discussions of mapping insights. This one-credit course meets on Saturday, November 7 from 12 noon to 6 p.m. and Sunday, November 8 from 12 noon to 2:45 p.m.

Speculation as Process
(1 Credit) ITPG-GT.2741.1 Call#21091  Sat 9/12 1:00pm to 5:00pm  Chris Woebken
Sat 9/19 1:00pm to 5:45pm

The Speculation as Process course is built around ongoing research on futuring methods at The Extrapolation Factory. Over the course of the class, we will develop imagination devices and futuring process followed by an iterative series of rapid investigations, incorporating design-fiction prototyping and re-contextualization of the ideas generated. The class will research new
tools and methods for generating speculative concepts with the intention to suggest developing new interactions and tools around emerging scientific research in the area of to be re-contextualized back into New York City (ie. Finance world, Psychic Reading Salon or Office of Emergency Management). The multiplicity of speculative prototypes aims to develop a new language for engaging with these emerging scientific and technological developments in the efforts for providing a system for situating near-term efforts with future guideposts, shape design discussions and ultimately evaluate those developments and influence our collective futures.

This one-credit course meets on Saturday, September 12 from 1 p.m. to 5 p.m. and Saturday, September 19 from 1 p.m. to 5:45 p.m.

Educate the Future
(2 Credits) ITPG-GT.2745.1 Call#20999  Fri 3:20pm to 5:50pm  Gregory Dorsainville
The New York Times reported in the spring of 2014 that fewer High School grads have opted to attend College, halting a trend of increasing matriculation for four plus decades. What is going on? As education in the US experiences a shift from being perceived as the most obvious method of higher social mobility, the viability of Higher Education is in doubt. The product of Higher Education is ripe for upheaval with new thinking in the presence of the digital, mobile, and social media revolutions that have changed many industries this decade. This course will ask you to observe, imagine and create the vision of Higher Education, 1 year, 5 years, 10 years into the future. How will people learn? How will teachers teach? How will you measure your academic success? How will students connect to peers and experts? Who will be able to attend this future? Will higher ed be on your wrist or in a building? Will education be gamified? Our weekly conversation will have voices from people helping to shape and improve education today, with futurists, with designers, and with content creators. We will explore the current education landscape globally. We will restructure education in terms of experience design, with the goal of improving the experience for the learner. We will discuss how our experiences have motivated our learning. At the end we will design experiences that capture the essences of these visions.

This two-credit course will meet in the first seven weeks of the semester.

From Prototype to Fabrication: Planning for Mass Production
(2 Credits) ITPG-GT.2749.1 Call#21001  Thur 6:30pm to 9:00pm  Sarah Krasley
Navigating the world of mass production can be challenging. Prototyping and making one of something for class is pretty straightforward, but what happens when other people want one? How much will it cost to make five of what I made once? How about 50? How about 5000? Where will it be manufactured and with what machines? Questions like these can feel daunting. This class is for students who have identified a well-defined product idea and/or digital or physical prototype. Coursework will focus on increasing the student's understanding of how they would attempt to mass produce the product and how much it would cost. Classes will be a combination of lecture, hands-on work, and student presentations. Between the first and second session, students will be assigned to work through a network manufacturer to complete their BOM and RFQ. This two session class teaches an approach to planning for mass production. In the first session, we will learn what goes into a Bill of Materials (BOM) and how to structure a request for quote (RFQ). In the second session, we will review student presentations of their results working with sourcing providers and evaluate different options for production against a set of criteria (hypothetical and real).

This two-credit course will meet in the first seven weeks of the semester.
Hardwired for Stories Out Loud: Why Stories Matter
(2 Credits) ITPG-GT.2755.1 Call#21003    Thur 12:10pm to 2:40pm    Adaora Udoji
Storytelling may be the "new" thing in technology, but it's way more than a buzzword. It's so central to how we learn, communicate, think and invent that we may indeed be hardwired for storytelling.

It may also be one of the most important skill you can learn for your career. It is the ability to communicate your ideas effectively, and be the best spokesperson for those ideas. If you want to be ready and more confident in your presentation skills for Thesis..and the rest of your life...this course is for you. This course is part seminar and part training in the art of how to present your ideas well.

In this course, you will: 1. explore what a story is, why stories work 2. design and build a framework based on the cross discipline principles (you tell stories all the time, and have the power to do it well. 3. apply it to the work you are doing-- whether representing yourself, your ideas, the things you build or want to build.

This seminar examines and deconstructs verbal storytelling as a discipline in its own right. It is an exploration of speaking and storytelling as a fundamental building block of human evolution and innovation. We will look at the learnings from ancient times through modern scientific research—looking at theories attempting to explain what happens physiologically and psychologically when we are moved by a spoken narrative.

This is a contextual approach that will focus on both the theory and the application in the marketplace of developing and delivering narrative as it relates to presenting oneself, a product or a service.

As such, we seek to understand what drives current trends toward narrative education and storytelling as a competitive advantage in learning, communicating, persuading and influencing. Students will also contribute to designing a collaborative verbal communication template for the class and for the Final Project: a presentation that applies some of the concepts learned to themselves or their projects, products, ventures and/or service concepts.

This two-credit course will meet the first seven weeks of the semester.

Intro to Fabrication
(2 Credits) ITPG-GT.2637.3 Call#20757    Wed 6:30pm to 9:00pm    Benjamin Light
(2 Credits) ITPG-GT.2637.4 Call#20758    Wed 6:30pm to 9:00pm    Benjamin Light
Time to get your hands dirty. Prototypes need to be created, motors have to be mounted, enclosures must be built. Understanding how things are fabricated makes you a better maker. But hardware is hard. You can’t simply copy and paste an object or working device (not yet anyway), fabrication skills and techniques need to be developed and practiced in order to create quality work. You learn to make by doing.

In this class you will become familiar and comfortable with all the ITP shop has to offer. We will cover everything from basic hand tools to the beginnings of digital fabrication. You will learn to use the right tool for the job.

There will be weekly assignments created to develop your fabrication techniques. There will be in class lectures, demos, and building assignments. Emphasis will be put on good design practices, material choice, and craftsmanship.

Section 3 of this two-credit course will meet in the first seven weeks of the semester; section 4 will meet in the last seven weeks of the semester.
Product Autopsy  
(2 Credits) ITPG-GT.2775.1 Call#21010  Tues 6:30pm to 9:00pm  Leonardo Bonanni  
Where do things come from? What are they made of? How do they impact society and the environment? That is what this class is about. Product Autopsy is the process of revealing the hidden life of things: the people, the places, and the ideas that made them possible. Over the course of this half-semester class, students will select personally relevant products or services and disassemble them to reveal their impact. Along the way we will become familiar with the state of the art in impact assessment, including environmental footprinting / Life-Cycle Assessment, social impact assessment, cultural sustainability and operational risk and resilience. Over the course of seven sessions students will prepare a detailed autopsy of their selected products using the most relevant impact metrics and present the results in a mid-term exhibit/review. Projects will be evaluated with an eye toward finding opportunities for radically sustainable alternatives to the way things are made today.  
This two-credit course will meet the first seven weeks of the semester.

Cooking With Sound  
(4 Credits) ITPG-GT.2940.1 Call#20762  Mon 3:20pm to 6:15pm  T3db0t Hayes  
What is it about the propagation of compressed air waves that gives rise to such a vast panoply of history, culture, ideas and artworks? What exactly does sound consist of, and how can we use (and abuse) it? Utilizing sound in our projects is a lot like cooking: we find and make ingredients, manipulate them, mix them together, bake at 400º, serve. Cooking With Sound explores the phenomenon of sound from the ground up, investigates its history, practice and potential as a medium for art, communication, and pleasure, and provides students the skills and knowledge for forming and shaping these potentials. Topics include acoustics and the physics of sound (and how a single vibrating string gives rise to music theories around the world), the digitization of sound (and how you can do it yourself with a handful of resistors), sound as art medium and its interpretation and criticism, and the many various tools and techniques for wielding this ephemeral yet eternal wonder.

Designing Participation in the Networked Economy  
(4 Credits) ITPG-GT.2763.1 Call#21013  Mon 6:30pm to 9:00pm  Liz Barry / Bill Wetzel  
Chances are, your latest project or enterprise features ways for people to “get involved” and “take action.” But what does it mean to truly participate? This class introduces the idea that participation itself, from digital to non-digital, needs to be designed. We will explore collaboration ventures occurring in the knowledge production, transportation, housing, education, food, and finance sectors. We will analyze these models of participation for their social and economic impact, then develop our own participation spectrum and apply it toward crafting new problem statements. Throughout this course, we will explore when technology can serve as a democratizing force, while assessing the limits of virtual participation.  
Keywords: collaboration, power, facilitation, decision making, community management, network economy, digital labor, platform cooperativism  
"In addition to the survey across sectors, and the development and application of our own spectrum of participation, after mid-term we will spend time getting into the details of online community management and group facilitation. The final project would be to craft a problem statement for a particular issue/sector that clearly articulates a participation design. Problem statements will be delivered to a relevant audience (via PublicLab.org, Medium, others). " Seminar with possible field trips and guest speakers.
The Stratosphere of Surveillance
(4 Credits) ITPG-GT.2779.1 Call#21017 Thur 09:00am to 11:30am Adam Harvey
Mass surveillance is a vast yet largely invisible infrastructure that enmeshes our cities, workplaces, homes, borders, and even our social interactions. From the databases that store our most personal media to the satellites that peer down from space, this class explores the stratosphere of surveillance technologies that are reshaping the world order.
This class begins by inverting Bentham's architecture of the Panopticon and placing the individual at the center. From here we will look outward at the myriad ways of being seen, analyzed, and tracked through real world examples and demonstrations of both lo-fi and advanced surveillance techniques. Technologies covered include biometrics (face, iris, fingerprint, and gait); online tracking (cookies, browser fingerprinting, network analysis, and packet sniffing); advanced imaging (thermal, IR, aerial, computer vision, and capturing "media in the wild"); and hacking (using examples from Kali/PwnPi). Selected texts will accompany each set of technologies and we will discuss their implications in class.
After developing an understanding of the diversity of surveillance technologies, students will work collaboratively to develop a well researched response to subvert, critique, improve or adapt to the type of surveillance they find most relevant.
Through topics covered in this class students will gain a technical understanding of surveillance, security, and privacy enhancing technologies; be able to communicate securely using encryption; and learn how to better navigate the emerging landscape of mass surveillance. A working proficiency with the command line and basic programming techniques is recommended.

ALL COURSES CARRY A $240 ITP LAB FEE.