

N290 Syllabus
Creative Concept Development
(with an emphasis on the marketplace of media, information and communication technologies)

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to communicate, rather than any other email**

Course Description

Nearly every day we hear about some marvelous new gadget or application of media, information and communication technologies – all competing for your dollars and your attention.

Why do some ideas succeed and others fail in the marketplace?
What are the processes that can turn a decent idea into a really good idea, even a great idea? Of course we love our own ideas, but how can we learn to define and refine our own concepts to make them more powerful, more focused, and more likely to appeal to others?

Through freewheeling discussion, readings from mainstream reporting of the media marketplace, and a modest amount of writing, N290 introduces students to the conceptual strategies and creative techniques used to generate innovation in digital goods and services.

Through classroom dialogue, field trips and short research papers (average 2-3 pages per week), students acquire a broad view of the ever-changing industries of media, information and communication technologies. Just as important, students will learn the basics and advanced techniques of brainstorming and concept development. These skills will allow students to create innovative approaches to problem solving in the constantly changing landscape of media technologies.

This course teaches how to use the software between your ears, rather than the software in your computer. But the skills you learn in this class won't be outdated and replaced by the next version of a particular software platform.

Office Address: WK 314 (Walker Plaza is an easy five-minute walk north from the IT Building, along Indiana Avenue.)

Office Phone: 278-4913

Office Hours: All office hours are by appointment. Students must schedule an office meeting via IUPUI email (and NOT via CANVAS). Office meetings may be scheduled for any reason and are considered confidential. Whenever possible, student requests for meetings will be honored within 3 days, with meetings in the afternoon sometime between 1 p.m. to 4 p.m.

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The Mission of IUPUI is to provide for its constituents excellence in

- **Teaching and Learning**
- **Research, Scholarship, and Creative Activity**
- **Civic Engagement**

With each of these core activities characterized by

- **Collaboration within and across disciplines and with the community**
- **A commitment to ensuring diversity, and**
- **Pursuit of best practices**

IUPUI's mission is derived from and aligned with the principal components – Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices – of Indiana University's Strategic Directions Charter.

Statement of Values

IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana's capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community; both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.

Required Text:

There is no required text for N288, SPR 2012. Instead, students will make wide use of the Internet and mainstream print media (e.g. Wired Magazine, The Wall Street Journal, Fast Company, etc.) to explore the real world of the media and information technology marketplace.

Course Outcomes:

Students will acquire a broad and sophisticated understanding of the power of creative concept development in the production and marketing of interactive, digital goods and services. Students will learn to use current information resources to search out and understand real world companies that produce these goods/services, to verbally analyze their concepts and to develop the ability to conceptualize new forms of interaction that could succeed in the marketplace. Students will also polish their writing and oral presentation skills, and learn to think analytically about how companies in the media-information-communication industries (or companies that use these technologies as a fundamental part of their business, can succeed (or fail).

Core Competencies:

Students will learn to express themselves in written and spoken forms, and address the conceptual challenges of the assignments.

Software used: Internet, word processing, perhaps Photoshop and PowerPoint, but students are encouraged to use any other appropriate software for class projects. In the past, students have come to class with significant software skills, and the class is designed to allow students to use any skills they already possess or can learn – because that’s how the real world works. Self-starters and self-learners succeed. Students will have the option to deliver their ideas in almost any mediated form that seems appropriate (For example, for some assignment a simple written document might be most effective, but for another assignment an online video might be the best way for the student to communicate ideas.)

Expectations/Guidelines/Policies:

Some basic expectations:

Attendance is mandatory in all class sessions. (Students who face unavoidable circumstances, e.g. family illness, should contact the instructor.) Attendance sheets will be passed around and each student must sign them. Two absences will lower your semester’s grade one letter, even if you turn in all assigned work. All assigned work must be completed and handed in.

Students must verbally contribute their ideas in class.

Class structure is straightforward. There is one class session each Thursday starting at noon and lasting until 2:40 p.m. Class time will be divided into lecture,

then discussion, then a time set aside for self-directed research with teacher guidance. However, it is expected that students will devote time outside of class to fulfill the assignments. How much time each assignment might require is a case-by-case decision by each student.

Assignments and tests are graded on 1) original thinking of creative concepts, 2) quality of research into target markets or companies and 3) verbal explanation of ideas and processes.

N290 Syllabus

FIRST VERY IMPORTANT THOUGHT:

– Let us understand that the syllabus is a “living document.” Like any innovative or creative business idea, it must evolve to fit the circumstance of the market, of the people and personalities involved, and the unpredictable ideas, opportunities or constraints that may arise on a week-by-week basis.

AND THIS MEANS (sorry if I shout) that *sometimes* we may start the week with an idea presented in the syllabus, but then, because we had an interesting class conversation, we might just jump out of the order described in the syllabus to explore a different direction or to take another idea from the syllabus out of order.

The course is driven by a deep desire to make the concept development process fun and engaging, and this means that sometimes the course must be responsive to the students, and the dynamics of week-by-week progress. In other words, if the core idea of one week appears to really resonate with the class, it might be a good strategy to repeat it the next week, but perhaps with some slight variation (even though the syllabus calls for something different). Or, in the course of classroom discussion, it may appear valuable to skip in the syllabus to address a another idea of concept development technique that is scheduled for a future week. In short, the syllabus can be creatively re-configured as student ideas and feedback help shape the collective class understanding.

Your input process is **CRUCIAL** – so please speak up and express your ideas. In fact, classroom participation is a significant part of your grade.

The basic class strategy is lecture-discussion about concepts that may be new or challenging to students – not because these concepts are overly complex or require special experience or ability, but because they are basically *functional* concepts (“how to” strategies for thinking creatively) rather than established knowledge (“what is” information). Although many students have some experience with brainstorming or thinking creatively, this class takes a fairly rigorous approach to the brainstorming processes presented in lectures, and we treat it almost like musical or athletic practice rather than simply an intuitive process that some people do better than others. Students may progress at different rates, and some concept development methods will feel easier or harder to absorb. **PLEASE NOTE: As stated above, as the semester evolves, the syllabus may be adjusted to achieve maximum learning for the entire class – and the assignments described below may evolve to take advantage of new ideas and opportunities discovered in classroom discussions.**

But the basic goal of the course will remain constant: Students will learn to think more creatively, and in the process will also acquire a broad knowledge of the many different ways that media-information-communications technologies are transforming the marketplace.

Week One

Intro to course, the concept of “Creativity” and an explanation of the marketplace as the center of our attention. Further explanation of expectations and requirements: Attendance, note taking, participation in class discussion, independent research and investigation of new marketplace ideas via mainstream media (newspapers, business-related magazines, Websites, blogs, etc.).

Introduce basic weekly assignment: Come to class with one great example of creativity or innovative media-information-communication (MIC) technology applications, something described in some mainstream media – and can be found via online search.

Beginning discussion of creative thought processes: What IS creativity? Simple ideas of Word Origin Play (seeing how concepts evolve in history by tracing the etymology of words defining those concepts) and “Google Combo” (arbitrary combinations of words via Google to see what’s out there.) Basic discussion of how the goals of creative activity (e.g. self expression, profit, respect of your peers, success in the marketplace, etc.) may determine your methods. Because this class emphasizes the marketplace, the discussion will center on the role of creative concepts for goods and services that will thrive in the marketplace rather than creativity as we understand it in works of entertainment, art, music, video, movies, games, etc. The idea of marketplace innovation will be discussed through the lens of small, medium and larger corporations, addressing local,

national or international markets. Throughout the semester, the class will examine a variety of such companies and corporations addressing a wide variety of products and services.

Assign first mini-paper: Find the strangest, most unpredictable media-information-communication technology through **Google Combo**.

As we discussed in class, the process of being creative CAN be learned, and does not rely on a person being "naturally creative" or artistic or something like that. Creativity IS a skill, like cooking or riding a bike or sewing or carpentry, etc.

One of the first steps in learning to think creatively is to loosen up your mind to the point that pre-conceived ideas about any subject can be put off to the side, and your brain can become open to unpredictable ideas that relate in some unexpected way to each other, and to your original focus. Remember how, in class, we went to Google and explored some random word combinations. We had no way of predicting what we would find --- but presto-changeo -- there it was: A brilliant idea for printable aromas. Of course, someone had already been working on this idea, so we can't claim too much credit for that. But then we talked about how this idea might possibly be applied in a wide variety of situations. The APPLICATION of new technology is where most of the creativity occurs.

This first assignment is a three-page paper of approximately 700-800 words. In this assignment you must go through the same process of Google Combo (or Google Gumbo) searching with some random word combinations. You can generate these words any way you want – pick up a newspaper and randomly touch some spot and use the nearest verb or noun or adjective. Words like "running" or "cookie" or "healthy" – rather than words like "rather" or "like" or "the". However, as you continue to explore the Google Combo approach, you should be willing to use similar words or synonyms to loosen up the process. So, "running" can become "runners" and "cookie" might become "pastry" --- and "healthy" might become "nutritious" or "nutrient," etc.

In this way, Google is a tool to allow users to find quickly associations that might not seem obvious, and may not even be directly connected to your original thought. The key is to let the process take those unexpected turns, let those words suggest related words, even if the degree of relationship is only like a third cousin.

THEN, add the idea of technology by introducing terms such as "digital" or "technology" or "electronic" or "app" etc. So, now we're looking for the "digital runner's health pastry" – or something like that.

Do this three or four times, and follow each exploratory thread until you can come up with what you think is a pretty reasonable idea. (Like Tommy's idea about adding an awful smell to dangerous household products to make sure little kids stay away.)

The paper should just describe the successful or interesting ideas you came up with, and the thought processes that led to it – the words you used, the changes in direction of your searches, and just generally what your thought process was.

Not every interesting idea will automatically be a media-information-communication technology or application. Not a problem. What we are looking for now is just that sense of exploratory investigation and conceptual improvisation that you used to go from point A to point Z.

To 10 times and produce a written paper with 10 cool ideas that have grown out of your free-

associating through search. The results will be a paper of approx. 3-4 pages, with 10 ideas that you have found or evolved from a simple starting point with two or three randomly combined words in a search.

My advice, start with two nouns, and feel free to add other nouns or verbs, adjectives, etc. as you go along. The trick is move QUICKLY -- to throw words together, quick scan the search results, and decide very quickly if there is anything there that interests you, that seems like there might be a useful-valuable-intriguing-MARKETABLE idea if you just gave it a little push in one direction or another.

AND, most important, we are looking for ideas that somehow engage some element of MEDIA, INFORMATION, COMMUNICATION or generally INTERACTIVE technologies. We take a pretty broad view of what these technologies might be -- for example, an old-fashion ink-paper book is a kind of information technology, and even a cassette tape is a type of media technology. However, in general, it is a useful strategy to introduce at some point into your search a term such as "digital" or "cyber" or "hi-tech" or "wireless" or "e-" or "electronic" any term that relates to 21st century technologies.

Write ONE healthy paragraph about each of the 10 searches. In that paragraph, first tell us the final product/service, then tell us where you started and explain the simple step-by-step conceptual path you took to arrive at the final idea.

Week Two

Each class begins with brief (10 minute) discussion based on several mini-papers based on individual journal reporting on strangest MIC innovation brought in by students. Prize for strangest. Assign next mini-paper on any of the **6W** questions (explained below) applied to MIC technologies in the marketplace. (Short paper must use different topic than mini-paper.)

Continuing discussion of creative thought processes. Define basic operating principles for innovation in media-information-communication (MIC) technologies: Everything is "smart" and everything is connected. If you can imagine it, someone can build it. Business generally requires a problem that needs to be solved, a pain that needs to be relieved, but sometimes the hardest part is identifying the problem. Every "thing" in MIC technologies is a solution to a problem that may have been solved so thoroughly that people forget it ever existed.

Introduce the "**6W**" basic questions of "What, Who, Where, When, How and Why?" Discuss the basic notion of delivering marketplace value by selective innovation at any of the Ws: Who uses what MIC technology how in what context? Context includes the where? and the when? and the why? of any MIC technology usage. Students assigned **short paper** (3-4 pages) to analyze an existing MIC technology that could potentially play a role in the corporate strategy of a real-world company that the student has identified, and then to suggest a change to one of the **Ws** to achieve a valuable innovation for that company in its market.

For example: With the dramatic rise of social networking as a factor in the marketplace during the mid-2000s (2005-8), many companies were unsure if this technology might be a useful tool in their marketplace strategies. How could social networking help any existing company chosen by the student. Students will analyze how social networking might influence the “What, Who, Where, When, How and/or Why?” of how that company designed or delivered some MIC-based product or service.

SECOND assignment – Transplanting an application to a different marketplace. Three pages, approx. 750 words. Worth 10 points.

For this second assignment, you should start with a real world business solution or marketplace innovation that you have seen in a newspaper or magazine or actually in a store, or even online. This can come from any industry – from games to healthcare to airlines to restaurants, etc. For example, in class we looked briefly at the new offering from the Pioneer company for a car audio application called Mixtrax – that automatically searched your car’s music library and arranged songs in sequence to sound like a DJ-directed mix at a club. Whether or not you think this idea is great and goovy or just plain idea or a silly, the point is that someone at Pioneer thought it was valuable enough to invest a bunch of dollars to develop it (Such applications can cost hundreds of thousands, even millions of dollars.)

Now, the question for your paper becomes, “Can this idea somehow work in some other context with different content or a different group of users?”

Remember how we talked about transplanting the idea of a digital “luggage tracker” with a text automatically sent to your phone when the airline scans your luggage tag? Then we talked about how this idea might be somehow transplanted into a “friend finding” application in a social venue?

Perhaps this might work in a concert or maybe a Pacers game where they scan your ticket when you enter. Want to know if your buddy (someone from a pre-selected list of friends) came to some popular club or a sport event like a Pacers game? Clubs and basketball games can get pretty loud, and this makes it harder to hear your phone ring. Why not have a system that can automatically send a text to your phone when someone from your friends list enters the facility? This way your buddy doesn’t have to take the time to individually text all his/her buddies. This is the sort of “transplant” concept creation that we are trying to develop with this assignment.

Of course in this case, the luggage tracker was actually NOT yet a real world application, so this example is only useful to communicate the general idea. For your paper, you must find an EXISTING real world MIC technology application and try to imagine it working in a completely different context.

As you probably found in your Google Combo papers, not every possible combination of ideas is going to suggest a plausible direction for a marketable development. Not every news item about some interesting new MIC technology is automatically going to inspire your creative abilities to apply this technology in a different industry. So, you might think about Mixtrax for 30 minutes and still can't figure how this would make sense in a different marketplace. Don't worry about it – just keep reading that newspaper or magazine until a usable idea comes up.

I would strongly suggest that you go out and buy yourself a newspaper or magazine where the editors have already compiled a group of several interesting ideas. The "Marketplace" section in the Wall Street Journal is generally a great place to find 10 or 12 interesting ideas every day. Or, drive to Half Price Books (or go online) and look for back issues of magazines such as Fast Company, Wired, the MIT Technology Review or Popular Mechanics, or Entrepreneur or Forbes or any magazine that is trying to reach a readership interested in all of the thousands of ways technology is impacting business. Any of these sources will provide enough interesting ideas that at least one of them will ignite and inspire your imagination.

Once you do find that inspiring idea, your next task is to go to the Web and find out if someone has already developed this or a very similar idea. If so, see if you can figure out a reasonable variation or even a whole new application.

Then, like the Google Combo paper, write a 750-word paper that describes your conceptual search and your thought processes. Make sure you mention the sources you used to get the original idea and any other sources you used as you began to explore it.

If you get stuck, try loosening up your creative muscles with a little Google Combo sauce – just find a few words to describe the application, then add another word or two that refers to a completely different industry. Remember how we started our exploration and concept development about "audio supermarkets" and then threw in an extra word or two to see where it took us? That's simply another strategy to help send your imagination to places it might not have gone otherwise.

Good luck, and try to have some fun with it. That "fun factor" can be a real stimulus to creativity.

Week Three

Class begins with brief (10 minute) discussion based on several mini-papers on MIC innovation brought in by students. Assign mini-paper on **OFPI** model for MIC technologies (explained below).

Continue discussion of the **6W**. Students offer up short discussions of their short (3-4 pages) 6W paper, class critiques the ideas. Hand in papers.

Begin discussion the **OFPI** model of understanding MIC technologies: **O**bject (the physical thing), the **F**unction (how we use that thing and what other things are needed to fulfill that function), the **P**rocess (several functions linked together) and **I**nstitution (several processes linked together). Creativity can occur at ANY level of the OFPI model. Discuss the idea of “mission” and “rules and spirit” in understanding how institutions evolve over time, and how such evolution requires innovation and creativity. Explore the importance of “theory” in understanding the mission of an institution. This is the “why?” question on steroids.

Students assigned short **paper (3-4 pages)** to analyze any existing MIC technology from **OFPI** perspective, then suggest a change to one of the levels to achieve innovation. (Short paper must use different topic than mini-paper.).

Week Four

Class begins with discussion based on several **papers**. Assignment for next mini-paper – find innovation at some step of the CENSE model for MIC technologies and marketplace. (Explained below).

Continue discussion of the **OFPI** – and the “mission, rules and spirit” of institutions. Discussions of the student’s short OFPI paper, class critiques the ideas.

Introduce **CENSE** model of MIC technologies and how it applies to user experience in the marketplace: **C**apture-**C**reate then **E**dit-**E**nhance then **N**avigate-Archive then **S**how-**S**hare then **E**valuate.

Week Five

Class begins with brief (10 minute) discussion based on several **mini-papers**. Open assignment for next mini-paper – student chooses topic-theme.

Introduce basic brainstorming process: Step 1 – Survey the Landscape, mention EVERY thing (**6W and OFPI and CENSE**), you can detect but pass no judgments; Step 2 – Criticize complain about anything, list problems; Step 3 – Solve problems by combining any element of landscape with any other. Teacher leads first experience. As class gains confidence, class practices in physically separate groups of 4-6 students, preferably with a section of white board available for each group.

Begin discussion of brainstorming using the “stepping stone” process. Start with a MIC “thing,” list its **CASES** (connections, associations, synonyms, equivalents and similarities); pick one and list its CASES, moving from association to

association until you have created a step-by-step path to an unexpected point of innovation. Teacher leads first discussion. Class practices in small groups.

Week Six

Class begins with brief (10 minute) discussion based on several **mini-papers**. Open assignment for next mini-paper – student chooses topic-theme.

Continue discussion of brainstorming and stepping stone process. Class practices in groups of 4-6 people.

Week Seven

Class begins with brief (10 minute) discussion based on several **mini-papers**. Open assignment for next mini-paper – student chooses topic-theme.

Introduce the “**5A**” Process of MIC Analysis: 1) **Anticipation** of Place-Experience; 2) **Actual** Experience AT the Place with all its OFPI; 3) **Aftereffects**: what are the aftereffects and after-actions that we experience? And, most important, can any MIC technology 4) **Add** to the experience or 5) **Alleviate** any problem? Discuss how this **5A** analysis will be applied to class field trips to various Museums (State Museum and Eiteljorg are easiest), City Library, Circle Center Mall, Crown Hill Cemetery, Church, Conesco Fieldhouse, World War Memorial, etc. In a two-class week, we will devote one class day to visit, next class day to discuss. Each week students write a short paper (3-4 pages) that analyzes site’s potential for MIC enhancement with any technique or perspective the student prefers: 6W, OFPI, CENSE, Brainstorming, 5A. Assign **short paper (3-4 pages)** that is a “dry run” for any site the student chooses, anything convenient or interesting to them, but from the perspective of a real-world company the student has selected. Hand out directions for first field strip site.

Week Eight

First field trip to Site #1. Meet at the Site --
Class discussion on second day.

Week Nine

First class devoted to discussion of Site #1 from the perspective of real world companies chosen by students. Hand out directions to second field trip site. Second class devoted to field trip to Site #2; meet at the site. Write **paper (3-4 pages)** over the weekend,

Week Ten

Class discussion on class; write **paper (3-4 pages)** over the weekend.

Week Eleven

Discuss papers for Site #2 on first class; students may modify this paper and turn in before second class. Second class of the week devoted to field trip to Site #3 for second class. Write **paper (3-4 pages)** over the weekend.

Week Twelve

Discuss papers for Site #3 on first session; field trip to Site #4 for second class. Write **paper (3-4 pages)** over the weekend.

Week Thirteen and Fourteen

Discuss paper for Site #4. Students pick their own individual site to visit several times and analyze in depth **for final 8-10 page paper**. Students will come to class to discuss experiences, use class time to brainstorm with professor or other students. However, this is not a team-written paper, and all students will be expected to find individual perspectives and ideas for innovation.

Week Fifteen

Turn in final paper and discuss. Student evaluations

Total paper commitment:

7 mini-papers (7 pages max.)

3-4 page paper on 6W

3-4 page paper on OFPI

3-4 page paper for 6W-OFPI-CENSE-5A synthesis for student-chosen site.

3 short papers (3-4) pages on field trip sites.

8-10 page final paper

33-41 pages total, averaging to approx. 2.5 pages of writing per week.

Grade based roughly on a 65% papers / 35% class discussion formula, with a policy of "grading to strength" which allows for some flexibility for people who may be better at writing but relatively quiet in class, or vice versa.