Living Syllabus Winter Quarter 2003 (Version 2.0: 10/25/02)

TEC913 Intellectual Capital Management

Winter Quarter 2003 Offerings

Section 81: Monday Evenings, 6:30 to 9:15 p.m., Room TBD, Evanston, Jacobs Center
Section 71: Tuesday Evenings, 6:15 to 9:00 p.m., Room TBD, Chicago, Weiboldt Hall

Course Description: The course covers the broad agenda of using intellectual capital for competitive advantage. In the knowledge-intensive economy, intellectual assets like human capital, intellectual property, brands, and trademarks are becoming an increasingly important proportion of a firm’s total wealth. And yet, most firms do a poor job of managing intellectual capital strategically. In this course, we adopt a “lifecycle” approach to the management of an intellectual asset. This lifecycle covers the creation of the intellectual asset, the codification of the asset in the form of intellectual property (IP), the valuation of intellectual assets, the protection of intellectual assets, and leveraging of intellectual assets.

Why take this course? In the age of information, ideas and innovation are becoming the principal drivers of economic growth and competitive business advantage. In nascent and rapidly growing industries (biotechnology) populated with many promising start-ups, the agile management of intellectual capital and specifically intellectual properties can be the difference between survival and extinction. Additionally, digital product delivery is dramatically impacting the way that the expression of ideas, software, business processes and other elements of intellectual capital are being created, acquired, leveraged and defended. Evidence of this fundamental change in business practice is best seen in the 700 percent increase in Intellectual asset licensing revenues $15B to over $100B that has occurred in the last eight years (1992 to 2000). In the past, strategists used a broad and smothering approach, like the way that a carpet bomber covers a target. The digital age has created a powerful new set of tools that are the legal equivalent of smart bombs, focused, directed and very lethal to competitors. In this course we learn all about Intellectual Capital, the individual Intellectual Properties and the effective development and deployment of an IC/IP strategy. Knowledge of these tools and the corresponding value extraction mechanisms (licensing etc.) are becoming a core competence of the modern executive.

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Teaching Style: Intellectual capital management methods and practices will be introduced through demonstration and discussion in the first half of each class period. Industry specific examples will be investigated through case studies addressing firms in both the manufacturing and service sectors of the economy. Insight from the industrial experience of students formerly or presently involved with intellectual capital or property development programs is encouraged. The subject of Intellectual Capital and Intellectual Property, particularly as it applies to the evolving biotechnology and other high technology industries is very dynamic. While the instructor has considerable practical and research based experience in the subject, no single person can possibly remain on top of all the related issues impacting multiple industries. In this environment, It is expected that the students will be co-generators of knowledge. The class discussions and group project deliverable will help us learn from each other.
Reference Materials: There is no text for this class. There is however a case pack of reading materials/case studies that should be available in the bookstore. Additional reading assignments will come from public domain materials available on the web. Other materials will be handed out in class. Some of the reading assignments that can be downloaded from the courseinfo homepage may require Adobe Acrobat Reader. This software is downloadable for free from [http://www.adobe.com/products/acrobat/readstep.html](http://www.adobe.com/products/acrobat/readstep.html)

Deliverables: Each student enrolled in this course is expected to deliver on all of the items enumerated below. We will have paperless submission of assignments/projects using the "Courseinfo" system. Please keep hard copies of everything that your group submits to me electronically via the web based course info drop box.

Class Participation: (individual) Many of us want to hear what you have to say. Please participate fully in all class discussions and ask thought provoking questions. This means that you should attend all scheduled classes and notify the instructor when you will be absent. ICM/IP issues are also in the news on a regular basis particularly those related to digital music and biotechnology. Students are expected to regularly scan the business press and bring relevant articles to class for discussion.

Case Based Assignments: (Individual and Group) Case based and or assignment questions will be posted to the courseinfo site. Students should work in groups (group size TBD in first session) to answer all questions in writing. The write-up for any of these assignments should not exceed 2 pages. Please know that I am not looking for a re-statement of the facts given in the case. I am looking for succinct, insightful answers to the questions asked. Case based assignments should be deposited in the courseinfo sitedigital drop box 4 hours before classtime on the day they are to be discussed. Students should label files with the following format when depositing all files into the digital drop box: lastname_913_'01_Assign#.doc

Midterm Examination: (individual) The midterm for this course will be a straight forward, multiple choice, in class exam covering materials discussed in class and addressed in the assigned readings. A sample midterm exam from another course will be made available on the courseinfo web page.

Final Projects and Presentations: (Group) In this course we will undertake group projects that will investigate and analyze the IC/IP strategies of any number of firms and industries. For this deliverable, a comprehensive white paper and or case study will be due in the final week of the course. You will deliver this report in stages. If you can finish a preliminary draft, I am happy to review it completely and thoroughly as per a schedule to be discussed during the first lecture.

Grading: Class Participation 15%, Assignments and or case questions 20%, Midterm Exam 20%, Group Projects/Presentations 45%. Students should work in groups (group size of 4 maximum) in preparing assignment write-ups due at the beginning of the class as per schedule specified below. No late assignments or project reports will be accepted. Note that a self assessment of class participation and an evaluation of team member performance will be administered during the last class session on 3/11/02.

Kellogg Honor Code and Classroom Etiquette Guidelines: Generally speaking, students enrolled in this course should act in a manner consistent with Kellogg Classroom Etiquette guidelines described at the Kellogg Honor Code URL: [http://www.kellogg.nwu.edu/stu_aff/policies/honorcode.htm](http://www.kellogg.nwu.edu/stu_aff/policies/honorcode.htm) [http://www.kellogg.nwu.edu/stu_aff/policies/etiquette.htm](http://www.kellogg.nwu.edu/stu_aff/policies/etiquette.htm)

We will discuss this again during the first class session.
Tentative Class Schedule:  Week to week content and order as described in what follows is subject to change

Week #1:

Subjects:  Innovation and Intellectual Assets: Schumpeter and Value Creation, the Taxonomy, Sources of Innovation and the Continuum of Protection: Capturing ideas as transferable assets and property rights. Innovation, Intellectual capital policy and the theory of economic development.

- Schumpeter and the Theory of Economic Development: The role on innovations and new combinations.
- The taxonomy: intangibles, intellectual capital, intellectual assets, and intellectual property
- Sources of Innovations
- The continuum of innovation security and intellectual asset protection
- The Life Cycle of an intellectual asset
- Value Transference and maximizing the value of an intellectual asset using multiple forms of intellectual property with the brand being the end goal;
  - patents to brands (Aspertame and NutraSweet)
  - copyrights to brands (Disney and Snow White)
  - trade secrets to brands (CocaCola, Dolby)

Readings/Assignments for Next Class:


2. Appropriating the Returns from Industrial Research and Development, Brookings Papers on Economic Activity (Case Pack)


5. Read The Protection of Intellectual Property in the US, HBS note #9-897-046, in case pack

6. Read US Patent #5,978,807 downloadable from courseinfo website

7. Become familiar with Courseinfo class web site.

8. Browse information resources on IP at Franklin Pearce Law Center (http://www.ipmall.fplc.edu/) and other links on courseinfo web site.

9. Read, Patenting Pain  KGSM case in casepack, also posted to course info website

10. Prepare Patenting Pain case, Assignment #1, downloadable from courseinfo site.
Week #2:


- Innovation and Inventions
- From the Sybarites (BC) to the Venitians (Renaissance) to Adam Smith, Jefferson, James Madison and the US Constitution, Article 1 Section 8, a system of limited life monopoly rights granted to encourage public disclosure of useful inventions.
- What is patentable? *This is changing radically with Growth of IT enhanced commercial transactions.*
- Patents and the USPTO
- Patent Prosecution
- Strategies for patent prosecution, continuations, CIP’s, Divisionals, Reissues etc.
- Prosecution of patents for competitive advantage
- Wall Street Patents
- Business Process Patents
- Software patents
- Priceline’s patent; Amazon.com Patent
- The global Perspective on software patents, EPO, USPTO, JPO, PCT etc.
- Genome related patents, plant gene patents, human genome and Celera and Incyte Pharmaceuticals
- Discussion of the *Patenting Pain* (Celebrex/Pharmacia and Vioxx/Meerk) Case

Readings/Assignments for Next Class:

4. Read *Capturing Value from Knowledge Assets* CMR Reprint CMR108, in case pack
5. Read *Discovering New Value in Intellectual Property*, HBR Reprint R00109, in case pack
7. Read and prepare *3M Espe: IP Strategy in German Dental Materials Market*
Week #3:

Subjects: What you really do not want the competition to know and can keep them from learning: Trade Secrets, employment contracts et al.

- The continuum of innovation security and intellectual asset protection: From Tacit to Explicit Knowledge
- Managing Lead innovators with an abundance of valuable tacit knowledge
- The nature and scope of “confidential information”
- Trade secrets and employment contracts
- Theory of Inevitable Disclosure
- Intellectual Property and the courts
- What is a Trade Secret
- Some definitions of trade secrets and the trade secret statutes
- Effective strategies for Trades Secret formation and protection
- Is the internet a threat to trade secret protection?
- Value transference from Trade Secrets to Trademarks/Brands: Coca Cola, Dolby Systems, Zildjian Symbols
- Discussion of 3M Espe Case

Readings/Assignments for Next Class:

1. Read *Who will own your next good idea?* by Charles Mann in the Atlantic Monthly found at [http://theatlantic.com/issues/98sep/copy.htm](http://theatlantic.com/issues/98sep/copy.htm) This is part one of a three part series.


5. *Copyright on the Internet* at [http://www.fplc.edu/tfield/cOpyNet.htm](http://www.fplc.edu/tfield/cOpyNet.htm)

6. Read and prepare *RIAA vs. myMP3.com* KGSM case, on courseinfo URL

7. Prepare *RIAA vs. myMP3.com* KGSM case questions (see courseinfo web page under assignments tab)
Week #4:

Subject: Management of the expression of ideas: Advertising, Software, Web Interfaces, Copyrights

Topics:
- Innovation in the expression of ideas in advertising and other mediums
- What is a Copyright and what can be Copyrighted?
- Derivative works
- Parity: *The Wind Done Gone*
- Regulating bodies in the copyright business.
- Copyrights and registration in the Copyright office
- Doctrine of "fair use"
- Examples of questionable copyright behavior from the web
- Effective strategies for Copyright protection in the "Information Age"
- Content protection on the web including medical information about products protected by other forms of IP (patents, trademarks etc.)
- The copyright/Character right empire that is Disney, A best practice in media Value Transference
- The Global perspective on copyright
- Discussion of RIAA vs. myMP3.com case

Readings/Assignments for Next Class:

4. Read *Top Brands Scorecard*, Business Week, August 6, 2001 Article, on courseinfo site
5. Read *Top Brands Scorecard*, Business Week, August, 2002 Article, on course info site
7. Prepare *Prilosec and the Purple Pill* case questions for discussion of (see courseinfo web page)
Week #5:

Subject: Management of innovation source identifiers: Brands, Trademarks, Trade Dress

- Innovations in marketing and how we establish Brand identity through sound, smell, sight, and even taste
- Trademark, Trade Dress, Trade names in the context of a Brand
- Trademarks and the USPTO, Registration
- The continuum of Trademark Strength and strategies for leveraging same
- Life cycle costs of enforcing a descriptive mark
- Life cycle costs of enforcing a fanciful mark
- The Descriptive-Distinctive dichotomy in mark selection
- Leveraging a mark into multiple forms of protection, trade dress for product configuration, 3D marks
- Strategies for Trademark/Tradename protection in the Information Age.
- Domain names and Network Solutions Inc.
- Cyber squatters and Trade name/Trademark-Domain Name Disputes
- Metatag usage/Trademarks, typopirates
- Value Transference with Trade marks
- What is the value of a Brand.. The Interbrand methodology for valuing a brand.
- Discussion of the Purple Pill Case

Readings/Assignments for next class:


3. Read *The Purple Pill KGSM Case*

4. Read *The Purple Pill KGSM Case Supplement*

5. Read: Trade Dress: Creating Competitive Advantage on the Web, KGSM TECH919 Course Supplement
Week #6:

Subject: Intellectual Property Strategies in Pharmaceuticals and BioTechnology

- MIDTERM EXAM

- The US Pharmaceutical industry and the role of IP policy in encouraging investments in the revolutionary cures of the future.

- Productivity and creativity in the US Pharmaceutical Industry vs. other nations.

- The third world questions
  - Aids drug cocktails and the cost of development
  - What incentive exists for developing pharmaceutical treatments for diseases unique to under developed countries

- A review of Strategies and Tactics for extending patent monopoly franchises in FDA regulated markets
  - The Hatch Waxman Act
  - Pharmacogenomics
  - The Orphan Drug Act
  - Pediatric Studies
  - Introducing your own generic
  - Suing the generic and launching a 30 month exclusion period.
  - Paying the generic producers (Bayer, Cipro and Barr Laboratories)

- Strategies of fighting a franchise monopoly

- Discussion of Purple Pill and Prilosec

Readings for next class


2. Read Claritin and Sherring Plough, NYTimes Magazine 2001, downloadable for courseinfo website

3. Read Managing Intellectual Capital, CMR074, in case pack

4. Read 100 Most Valuable Brands, Business Week August 2002

5. Read *The Pullman Group and the Bowie Bond* (See courseinfo site)
Week 7:

Subject: Methods for measuring and accounting for intellectual assets: Beyond Baruch Lev

- Intangibles Assets and the balance sheet
- IP valuation based upon business and legal foundations
- Methods for valuing intangibles such as Patents, Trademarks etc.
  - Comparables methods, DCF techniques
  - Transactional
  - Replacement Costs
  - Income/Premium
  - Options/Binomial
- All about Interbrand and Brand Valuation
- Putting Intangible assets off shore and the tax footprint of a corporation

Readings for next class

- Read Pfizer: Global Protection of Intellectual Property, case 9-392-073, in case pack


- Who will own your next good idea? by Charles Mann in the Atlantic Monthly found at http://theatlantic.com/issues/98sep/copy.htm  Read part three of the series

- Read and prepare case and questions for Graftech and Ballard Power Case in Case Pack. Questions for class discussion on courseinfo web site.

Week #8:

Guest Speaker: John Pena, Associate, ARCH Venture Partners

Subject: Markets for and the securitization of intellectual properties: The Bowie Bond

- Review of the VC’s business Model
- Why do VC’s make investments?
- How is the process of innovation to commercialization managed by a VC and what is the role of securing Intellectual Capital and or Intellectual Property
- Stages of investment and roll of IC and or IP in each stage.
- Discussion of Graftech and Ballard Power case
Readings for next class

Priceline patent suit links http://www.wired.com/news/print/1%2C1294%2C31916%2C00.html

And http://www.informationweek.com/shared/printableArticle?doc_id=IWK19991014S0002

WEEK #9:

Subject: International issues in intellectual property management

- Leveraging Intellectual Assets: Licensing, Selling, Swapping, Litigation
- PCT, WIPO, EPO, and JPO; International IP Strategy.
- All project presentations need to be in courseinfo site digital drop box by 3:00 on 3/4/02
- Please bring your presentation to class and be ready to present at the beginning of next class
- Student Project Presentations

Week #10: Monday, March 11, 2002

Subject: Student Project Presentations (if necessary) and course wrap-up

- The Knowledge Economy: Where have we been? Where are we going?
- Course wrap-up, review of learning peer group evaluations, course evaluations.
- Peer Evaluations, course evaluations
Project Guidelines:

**Project Objective:** The objective of this project is for groups of students to undertake a strategic evaluation of the IC/IP activities of any firm and or industry of their choosing. Through this evaluation and the development of the associated deliverables, they should demonstrate an understanding and working knowledge of how secure, intangible assets are being developed, valued and deployed by players in the industry of their choosing to achieve some measure of competitive advantage.

**Project Format:** Here at Kellogg, there are many ways for students to satisfy the learning objective outlined above. As such, I am not going to proscribe any specific format for the project other than it should result in a well written document of no less than 10 pages (w/o figures) that demonstrates scholarly research, analysis, evaluation and conclusions relevant to some well defined topic in the general field of intellectual capital management. Be creative! Case Studies, White papers and any other clever deliverable that the students can generate are welcome. Examples of past projects will be posted to the courseinfo web site. A template for creating the white paper and the in class presentation will be posted to the courseinfo web site. MUCH more in this during the initial class session.

**Project Schedule:** The schedule for the project is as follows:

*This Schedule will likely be modified and expanded in living syllabus document by beginning of Winter Quarter 2002 course offering.*

**January 18, 2002:** Project Proposals (no more than 3 pages) due to JGC via electronic dropbox by 5:00 p.m. Feedback on proposals returned to student groups by 1/23/02

**February 6, 2002:** Annotated outline and detailed list of references due.

**March 4, 2002:** Powerpoint presentations due to be given in class to classmates.

**March 15, 2002:** Final project report due to JGC via electronic dropbox by 12:00 noon.

Those students that would like to have drafts of the project papers evaluated ahead of time can get them to me by Thursday 2/28 at 12:00 noon deposited in the courseinfo digital drop box. I will read and add my comments/editing suggestions etc. to any project report drafts that are submitted by that time and return comments to you to use in submitting the final draft.
Intellectual Asset Resources on the WWW:


United States Copyright Office: http://www.loc.gov/copyright/

E-Commerce and Internet Law Resource Center

Intellectual Property Mall Franklin Pierce Law Center: http://www.ipmall.fplc.edu/

Managing the Digital Enterprise: IP (NCSU page) http://ecommerce.ncsu.edu/topics/ip/ip.html


Foreign Patent Offices link page: http://www.uspto.gov/web/menu/other.html

European Patent Office: http://www.epo.co.at/epo/

German Patent and Trademark Office: http://www.dpma.de/index.htm

Micropatent Searches: http://www.micropat.com/

Information about Trademarks: http://www.ladas.com/Trademarks/tminfo.html


Unofficial Trade Secret Office: http://www.thetso.com/

Greg Aharonian and Bust Patents dot com: www.bustpatents.com


Patent Licensing Exchange: http://www.pl-x.com/xhtml/homepage.jsp