

## **Patent Project Pedagogy.**

**Bus 544 and Bus 460, Dr. Mark Meckler, University of Portland**

The patent project is a 19-22 work-hour term project. This rigorous project is appropriate for undergraduate seniors and MBA students. The project includes all six of the major learning objectives (knowledge, understanding, application, analysis, synthesis, evaluation). The patent project also emphasizes critical managerial skills of working under conditions of uncertainty and working under conditions of limited/shorted resources.

### **Summary:**

Students alone or in pairs create a high or low tech innovation, do a patent search, interact with specialists to figure out how to design the embodiment of the innovation, write a patent application, analyze and evaluate the business opportunity of the embodiment in terms of estimated revenues and costs (over time), and communicate the venture opportunity in a time-pressured presentation.

### **Stage I: The creative idea.**

Coming up with an idea and searching through previous patents, searching the internet for related products to make sure the idea is unique, original and patentable. *Creativity, intuition, analysis, synthesis, and research skills.*

3 work-hours

### **Stage II: The Patent Search**

This is a mini research project. Students have to figure out what “patentable” means. The USPTA website has pretty much all the info you need on that question, although the instructor might add some books to the library on the topic of patenting. Students research and learn the criteria. Students then check all sources available to them to find out if the innovation idea fits or violates the criteria. Students must document research method, and keep the data they collect. Students put it all together into an orderly short research report that concludes and supports either that the innovative idea is patentable or that the innovative idea is not patentable.

5 work-hours

### **Stage III: Moving from idea to innovation.**

Making the idea a reality by investigating design and functionality details.

Understanding the architecture and the ingredients/components that comprise your innovation. This usually entails seeking out and meeting with specialists for design and component details.

4-8 work hours

### **Stage IV: Moving from innovation to embodiment.**

Writing a patent application. Using previously granted patents after which to model the current patent application. Reading and utilizing White’s (1978) Evaluating the

*Knowledge, understanding, application, creativity, decision-making, recontextualization/synthesis skills.*

4 work-hours

**Stage V: The basic business pitch**

Analyzing and evaluating the opportunity for the innovation embodiment. Estimating costs and revenues. Five minute creative presentation. Who is the market? How will it be distributed? What is the revenue potential (price x market size)? What is the cost potential (cost per unit over time)? Students must produce a well edited presentable business plan.

*Analysis, application, research, decision-making, creativity communication, evaluation/measurement skills.*

8 work-hours