

**EGRMGMT 520: Intellectual Property, Business Law, and Entrepreneurship**  
**Duke University, Master of Engineering Management Program**  
**SYLLABUS – SPRING 2020**

**Meeting Time and Place**

**Tuesdays, 3:05 PM - 5:50 PM, CIEMAS Schiciano Auditorium A&B**

**Course Faculty and Contact Information**

**Segment 1 (Classes 1, 2, 3, 4, and 5)** – Jeff Ward – ward@law.duke.edu

**Segment 2 (Classes 6, 7, and 8)** – Bryan McGann – bryan.mcgann@lawnet.duke.edu

**Segment 3 (Classes 9, 10, 11, 12, and 13)** – Seth A. Watkins<sup>1</sup> – seth.watkins@duke.edu or text 703-622-0328

**Course Content – 3 Segments**

**Segment I – Engineers as Managers (Classes 1, 2, 3, 4, and 5)**

This first segment of EGRMGMT 520 focuses on basic business law understandings important for engineers as managers. As engineers advance into managerial (as opposed to strictly technical) roles, they are responsible for understanding the relationships among many parties and for managing the risks associated with their companies' endeavors. Many of these relationships are defined by **contract**, and many of these risks are best understood through the lenses of **contract law**, **tort law**, and **ethics**. In this first part, then, we will focus on understanding:

- The fundamentals of the **US legal system** (to provide context);
- The basic **law of contract** (contract formation, terms, termination/breach, remedies) and its application to engineering management;
- The basic **law of tort** (especially negligence and products liability) and its role in overall risk assessment and management; and
- Issues of **ethics** and how the professional responsibilities of engineers shape individual actions and industry standing.

**Segment II – Engineers as Entrepreneur (Classes 6, 7, and 8)**

Engineers will typically possess the skills to develop new inventions and technologies that, if properly curated, can lead to the next highly successful companies. New businesses face innumerable decisions and look to lawyers and other professionals for guidance and counsel on a range of legal and business issues. The more astutely entrepreneurial engineers can identify the most critical of these issues and “speak the language” of start-up law, the more likely a new venture will secure funding, avoid obstacles, and be positioned for long-term success. Beyond the critical intellectual property considerations that you will cover in Segment III, we'll discuss:

- Basic choice of entity considerations;
- An overview of the “the venture capital cycle” and other ways we fund our ventures;
- The basics of business associations (structure, agency, fiduciary duties, etc.);
- Some fundamental considerations when leaving a current employer;
- Building a team and the importance of management and expertise; and
- Recognizing and navigating risk in all of its forms, most importantly, financial, legal and regulatory risk.

In addition to a general framework for understanding the law in critical areas, this section of instruction will frequently offer practical advice from two key perspectives:

1. The perspective of a resource-limited start-up; and
2. The perspective of an early-stage investor or potential acquiror of the venture.

Understanding both of these perspectives can enhance your ability to play a role—whether as founder, technical advisor, employee, etc.—in the launch of a new company.

---

<sup>1</sup> My personal views expressed in this course should not be ascribed to the law firm at which I work or its clients.

### **Segment III – Intellectual Property ) (“IP”) (Classes 9, 10, 11, 12, and 13)**

Whether involving technological innovations, branding of products, or artistic expression, IP is valued and protected under U.S. law. This final segment of the course will introduce you to IP in a manner permitting you to develop some basic **legal intuition** about how IP can be identified, protected, and leveraged. We’ll study four primary types of IP:

- **patents** including how they are used to exclude others from making, having made, using, selling, offering for sale, and importing products or services related to the claimed inventions;
- **trade secrets** including the challenges of maintaining them;
- **copyrights** including how readily they are created and how important they are to our electronic/software-driven world; and
- **trademarks** including their central role in designating the source of goods and services.

Each of these types of IP differ in the protection they offer, and sometimes the same good or service can be covered by multiple types of IP (even all four!). Each also differs in the duration of protection, enforcement mechanisms, and transactional aspects such as licensing.

By studying the different types of IP, we seek to develop an appreciation for the role of IP in business strategies such as how IP embodies value and risk for the entrepreneur.

This course will delve into the practical and real-world aspects of IP. We will not be discussing legal theory *per se*, but instead will learn from examples of actual businesses relying on IP or caught in disputes about it. IP is treated so seriously in the U.S. legal system that when a dispute arises, billions of dollars and/or a company’s very existence and/or even personal freedom may be at stake for alleged wrongdoing. Patent, copyright, or trademark **infringement**, trade secret **misappropriation**, and **unfair competition** carry serious consequences in the form of monetary damages, injunctions, and even imprisonment.

#### **Online Class Discussions**

In addition to teaching Segment II, Dr. McGann will facilitate the online discussion boards. Even though Dr. McGann will serve as the primary facilitator and a common connection in the online components throughout all Segments of the course, all faculty will be engaged with and review online discussions. Please participate actively.

#### **In-class Discussions**

We all truly enjoy teaching this class and relish the time we get to spend discussing these topics. One of the most enjoyable aspects is great class participation. Because it’s a very large class, though, we ask (1) that your questions be relevant to the whole class and not too off track and (2) that you will not be offended if we move away from overly specific questions toward what is more generally relevant to all of us. Past experience proves that we will all get even more out of this class if we are able stay focused on the key topics; as one previous student wrote in an evaluation, “*My classmates ...tended to ask questions that were very specific and really only applied to them. If those questions could have been limited there would have been more valuable general class time.*” We will do our best to keep us on track and will hope that you will help us to do so, too.

#### **Course Materials for Each Segment**

All materials for this each Segment of the course will be available online via publicly available links or materials that will be posted at the course Sakai site. There is no need to purchase a text.

### Assignments, Quizzes, and Grading

Each Segment of the course will constitute 1/3 of your final grade, as follows:

- Segment I – 1/3 - Classes 1, 2, 3, 4, and 5
- Segment II – 1/3 - Classes 6, 7, and 8 + your participation in online discussion boards during the full semester
- Segment III – 1/3 - Classes 9, 10, 11, 12, and 13

In addition to materials covered in the readings and in class, materials posted to the Sakai discussion board are likely to be used directly in the quizzes, so students should make sure that they are actively participating on the discussion boards between classes. Please keep in mind that you will have multiple assessments during each segment, and final grades in the course will be curved according to overall class performance. Thus, it is important to note, there is *never* a reason to grow overly concerned about a single grade. Why? First, there will be multiple opportunities to demonstrate high success. Second, in the past the curve has resulted in overall favorable grades.

### Availability and Submission of Assignments

When an assignment/assessment is provided, all students—including distance learners—will typically have several days to log in and complete it. Beyond the assignments/assessments for each Segment, there will be no additional final exam or cumulative assessment for this course. All assignments should be submitted via Sakai by every student (even if the work was completed in a group) by the end of the announced due date (11:59 p.m. EST). For approval of a late submission, please send an email in advance of the due date. We will try to accommodate any reasonable request, understanding that you have many burdens on your time.

### Honesty & Integrity

The Duke Community Standard embodies the governing principles for this course. All students are subject to the University's policies on Academic Dishonesty, and each student will be asked to confirm the Honor Pledge at the inception of each assessment, which states clearly that "**I will neither give nor receive aid on this assessment.**" This means quite plainly that there can be absolutely no discussion, collaboration, or assistance with any other person or unapproved resource on the assessments unless expressly required as part of expressly designated group projects. Please know and embrace this standard. See <https://registrar.duke.edu/duke-community-standard>.

### Reading Assignments for Each Segment and Class Meeting

Reading assignments for each Segment will be provided separately by each faculty member well before the class meetings for that Segment. Please look to your email and the course Sakai website for assignment information