

**Syllabus for ENGR 192/292:  
Intellectual Property (IP) for Engineers & Scientists  
Spring 2018**

**Instructor:** Bradley W. Scheer

**Location:** COB 279

**Class Date/Time:** See attached schedule

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**Phone:** 408/660-2015 (Direct)

**Office:** NA

**Office Hours:** NA

**Required Materials/Text:**

- *Intellectual Property Law for Engineers and Scientists*  
IEEE Press; ISBN No.: 0-471-44998-9
- Classroom Clicker (can be purchased at Campus Bookstore)

**Course Description:**

This course is aimed for undergraduate and graduate students who may pursue a career in research and technology. We examine the laws behind Intellectual Property, covering material on copyrights for technology protection, trademarks, trade secrets, patent information including the patenting process, claim drafting, design patents, engineering ethics, and more.

**Student Learning Outcomes (SLOs):**

Through this course students should expect to gain:

- Understanding of patent law, and how patents are prosecuted and enforced.
- Ability to comprehend complex intellectual property scenarios, criteria that determine infringement, and considerations for product clearance to reduce risks of infringing the patents of others.
- Ability to draft a patent application.
- Understanding of the importance of intellectual property laws in modern engineering and the related ethical considerations involved.

**Attendance:**

- Attendance for this seminar course is mandatory. If you are unable to attend, you may be given an additional assignment on the topic missed for that day. Since there are only five class sessions, **you can miss no more than one class – you must be in attendance for the entirety for at least 4 of 5 classes.** Greater than one absence will result in you not passing the course. Also, if you are unable to attend class, you must contact the instructor at least 24 hours BEFOREHAND to be allowed to make up for any missed quiz. **If you do not contact the instructor prior to the scheduled class day and time as indicated, you will not be allowed to make up the quiz.**

**Quizzes/Final Exam:** See attached schedule. **Please note that a quiz will be given on the first class PROMPTLY AT 10:00 AM, so reading the assigned material in advance of the class is essential.** You will be allowed to drop your lowest grade on the quizzes.

**Term Paper:** One or more students may elect to write a complete patent application in place of the final exam. Full details will be provided in class. Students registered for ENGR 292 also have an additional project (to be discussed in class).

**Assessment/Grading Scale:**

- **Attendance/Class Participation: 10%**
- **Quizzes: 30%**
- **Final Exam/Patent Application: 60%**

**Final exam:** Tuesday, May 8, 2018; 3:00 PM – 6:00 PM, in COB 279.

**Course Policies:**

- 1. Students are expected to attend each class as scheduled, and to be on time. **The quizzes will begin promptly at 10:00 AM so you must be prepared to start the quiz by that time. You will not be allowed to “make-up” any missed questions.** Attendance will be taken automatically during the administration of the quiz at the beginning of each class. Therefore, to insure that your quiz score is assigned to your name, and to insure that you are logged in as being in attendance, **you must be sure to register your clickers in advance of the first class.**
- 2. Students may not use during lectures: laptops, notebooks, handhelds, etc. for purposes not directly related to the session content. All cell phones must be turned OFF. **Further, no photographs or other recordings of the test screens (slides) are allowed.**
- 3. Students are expected to read their e-mails at least once every 12 hours, and are responsible for any class-related announcements or directives from the instructor that might be distributed on UCM Cat Courses.
- 4. Students are expected to be attentive and respectful of speakers and fellow students at all times.

**Academic honesty:**

- 1. Each student in this course is expected to abide by the University of California, Merced's Academic Honesty Policy. Any work submitted by the student in this course must be the student's own work.
- 2. However, you are encouraged to study together and to discuss information and concepts in lecture with other students. You can give “consulting” help to or receive “consulting” help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e-mail, an e-mail attachment, a diskette, or a hard copy. Should copying occur, both the student who copied work and the student who gave material to be copied with both automatically receive a zero for the assignment. Penalty for violation of this Policy can also be extended to include failure of the course and University disciplinary action.

**Students with disabilities:**

- Please contact instructor.

## Lesson Plan

Date	Class Number	Class Overview	Associated Chapters ( <i><u>must</u> be read prior to class</i> )
1/20/18	I	Quiz <ul style="list-style-type: none"> <li>• IP Law Overview</li> <li>• IP in Business</li> <li>• Copyrights for Technology Protection</li> <li>• Mask Works</li> <li>• Trade Secrets</li> <li>• Trademarks</li> </ul>	1 2 22 24 25 26
2/10/18	II	Quiz Patents I <ul style="list-style-type: none"> <li>• Introduction to Patents</li> <li>• Information in U.S. Patents</li> <li>• Patentable Subject Matter</li> <li>• Novelty</li> <li>• Non-Obviousness</li> <li>• The Patenting Process</li> </ul>	4 3 5 6 7 8
3/3/18	III	Quiz Patents II <ul style="list-style-type: none"> <li>• Novelty, Infringement, &amp; Searching</li> <li>• Patent Applications</li> <li>• Claim Drafting I</li> <li>• Patent Prosecution</li> <li>• Design Patents</li> <li>• Business Method Patents</li> <li>• Foreign Patent Protection</li> </ul>	9 10 11 12 13 16 17
3/17/18	IV	Quiz Patents III <ul style="list-style-type: none"> <li>• Claim Drafting II</li> <li>• Computer-Related Inventions</li> <li>• Patent Enforcement; Technical Design-Around</li> </ul>	Review of 11 14 18
4/28/18	V	Quiz <ul style="list-style-type: none"> <li>• Engineers &amp; Scientists as Expert Witnesses</li> <li>• Engineering Ethics</li> </ul>	21