**University of Illinois - College of Engineering**  
**Industrial and Enterprise Systems Engineering Dept.**  
**SE 400 – Engineering Law**  
**Spring 2021**

| Professor            | Joe Barich  
|----------------------|-------------  
| Lecturer             | Department of Industrial and Enterprise Systems Engineering  
| Attorney             | Barich IP Law Group  
| Tel. (312) 620-2471  | joebarich@barichip.com  
| NB: A phone call is preferable to e-mail for complex matters. |

| Class Schedule       | • At student convenience, but must be completed weekly:  
|----------------------| - Lectures available online through Compass/Echo360  
|                      | - Quizzes available online through Compass  
|                      | • Optional Weekly Zoom Discussion Section – 4pm Thursdays  
|                      | • Three Pre-Scheduled Exams at Thursdays at 5pm on:  
|                      | - February 25th  
|                      | - April 1st  
|                      | - April 29th |

| Class Materials      | **Required Reading**  
|----------------------| Coursepack Available at Illini Union Bookstore (IUB)  
|                      | Also available online at  
|                      | Class Handouts/Links available at:  
|                      | [www.joebarich.com](http://www.joebarich.com)  
|                      | or on Compass  

**Recommended Reading**  
*Legal Aspects of Engineering*, by Cynthia M. Gayton  
(Kendall-Hunt Publishing, 10th Ed.).

| Grading              | All grades¹ are based on the following:  
|----------------------| Percent of Final Grade  
|                      | First Exam 25%  
|                      | Second Exam 25%  
|                      | Third/Final Exam 25%  
|                      | Quizzes 25% |

¹ For Graduate Students, please see [Graduate Student Credit and Grading](#) below.
More Detail With Regard To Class

Lectures

All lectures have been pre-recorded and a new lecture will be released each week on Compass as the semester progresses. Students may view the lectures each week at their convenience using Compass to access the Echo360 system.

Please note that the lectures were recorded during a previous semester, so please follow the times and procedures set forth in this Syllabus and the Spring 2021 Coursepack when they conflict with the pre-recorded lecture.

Optional Weekly Zoom Discussion Section

Each week I will be available on Zoom starting at 4pm on Thursdays to discuss any questions that students might have with regard to the course – including lectures, quizzes, and general questions. Attendance is completely optional. I am happy to answer any questions that students might have. However, based on my experience in the Spring and Fall, I am anticipating student attendance to be high on the first Thursday 1/28, but then drop off unless the Discussion Section is taking place immediately before an Exam.

The Zoom meeting info is below – this Zoom room will be used for all SE400 activities, including during exams:

https://illinois.zoom.us/j/85862842739?pwd=U1FsZFRPNG5BL25NQU9Ga3pldWlyZz09

Meeting ID: 858 6284 2739
Password: 400

Quizzes

Five Quizzes will take place during the semester using Compass. Each Quiz can only be taken during its scheduled week as shown in the Syllabus and can NOT be taken during a later week. This is because the Quiz questions will be reviewed in the pre-recorded lectures during the week after the Quiz.

NOTE: Each of the Quizzes involves material from that week’s lecture, so please view the lecture first before taking the quiz. (For example, Quiz 1 takes place during Week 2 and includes materials from the Week 2 lecture.) Quizzes will be available on Compass during their scheduled Week starting Monday at 9am and ending on Friday at 11pm. You must complete the Quiz by 11pm on that Friday or Compass will reject your submission as late.

Each Quiz counts as 100 points (500 points total possible), but your total quiz score is determined by dividing by 400 (not 500), with a cap at 100%. For example:

Example 1 - Took 4/5 Quizzes, got 85% on each one.
4 Quizzes * 85 points = 340/400. You get 85% for your quiz score.

Example 2 - Took 5/5 Quizzes, got 85% on each one.
4 Quizzes * 85 points = 340/400. Add in 85 points from 5th quiz, so total quiz points become 425/400, but cap at 400/400 for total quiz score of 100%

Example 3 - Took 5/5 Quizzes, got 60% on each one.
4 Quizzes * 60 points = 240/400. Add in 60 points from 5th quiz, so total quiz points become 300/400 for a total quiz score of 75%.
Exams (Compass +Zoom)

Three Exams will take place during the semester. Each Exam will primarily focus on material from the weeks immediately preceding the exam, but material from any prior point in the semester is fair game. Exams will be composed of multiple choice and true/false questions. Exams are closed-book, closed notes. The Exam will take place on compass and will only be accessible during the scheduled exam time indicated above.

Mandatory Zoom Conference During Exam

In order to allow me to proctor the exam and to have a real-time audio and video connection with students during the exam, all students will use their cell phones to initiate a Zoom call during the exam – using the Zoom meeting room info above. All students must keep their video and audio non-muted with their cell phone turned toward the computer screen on which they are taking the exam. Students must remain “live” and unmuted on the Zoom conference during the entire time they are taking the exam. Students that do not participate in the Zoom conference for the entirety of the exam or mute their voice or image without my permission may be subject to discipline – and their exam score may be penalized. If you have any technical questions or issues, please bring them to my attention before the Exam. We are just trying to keep things honest!

Graduate Student Credit and Grading

As per ISE Department policy, graduate level classes are 4-credit-hour classes rather than 3-credit-hour classes. Consequently, to obtain graduate credit for the additional class hour, graduate students must draft a paper of at least 10 pages in length on a legal topic approved by Professor Barich. The 10 pages must be double-spaced with 1-inch margins, and 12-point font – and please don’t mess with the standard Microsoft Word settings to try and make it look longer. Only your actual writing counts toward the 10 page requirement – For example, any title page, index, graphics, large block quotations, or bibliography does not count toward the page count.

Paper quality - You are a graduate student at a top university and your work quality should reflect that. Some aspects that may impact your grade include: the presence of misspellings or grammatical errors, the level of research/effort you put into your topic, and additional work beyond the minimum page length of 10 pages.

Paper grading – Take the average of the three Exams and the Quiz score that is used for determining the final grade and subtract the Paper Score Subtraction (if any) to arrive at your final grade. The Paper Score Subtraction is 0% if the final paper actually does represent the quality work expected of a graduate student at a top university, but may be as large as 5% for unacceptable work.

Paper topics must be approved by April 1st, but the earlier you can propose and I can approve your paper topic, the more writing time you will have. The final version of your paper must be turned in to me by noon on Monday, May 3rd.

In order to assist you in delivering high-quality work, you can submit a completed final draft of your paper to me for evaluation during the semester, but I will require 3 business days (not weekends) to respond with comments. Consequently, the last day to submit a draft to me will be Wednesday, April 28th.
Final Grades

Average the scores from each of the three Exams and the Quiz score and compare it to the chart below. The chart indicates the minimum grade that you will receive.

100-95 = A
95-90 = A-
90-85 = B+
85-80 = B
80-75 = B-
75-70 = C+
70-65 = C
65-60 = C-
Less than 60 = D
Less than 50 = F

Advice To Help You Get A Better Grade – Take Notes By Hand

Study after study has repeatedly confirmed that students that take notes by hand outperform students who take notes using a laptop or other electronic device. Here are just a few articles written about the studies:


Consequently, I highly recommend that you take notes by hand. In this regard, I note that the Coursepack has been specifically designed to allow you to take notes by hand so as to help you get the best possible grade. I recommend that you use it.

Electronic Device Usage Policy - No Audio, Photographic, or Video Recording Allowed

No electronic audio, photographic, or video recording of any class materials or conferences is allowed without my prior written permission. Any recording is a violation of the University Student Code and may subject you to discipline. There are at least two reasons for this: first, we want to provide an encouraging environment for student questions and discussion; and second, we want students and the instructor to have control over the use of their respective images and expressions.

Additional Syllabus Statements provided by the College or University may be found here: [https://wiki.illinois.edu/wiki/pages/viewpage.action?spaceKey=ugadvise&title=Faculty+Resources#FacultyResources-SyllabusStatements](https://wiki.illinois.edu/wiki/pages/viewpage.action?spaceKey=ugadvise&title=Faculty+Resources#FacultyResources-SyllabusStatements)
The Goal Of This Class

The purpose of this class is to provide soon-to-be engineers with an introductory understanding of the legal framework under which they will work. That is, all engineering is performed under the constraints imposed by our society’s laws and must take those laws into account.

More specifically, I have designed the course with the following goals in mind:

1) Give you a greater understanding of your and your company’s position relative to the law so that you can act and talk more intelligently on the subject and be a better asset for your company.

2) Highlight a few areas that often trip up people in industry so that you can avoid the pitfalls or raise a concern if your company seems like it might have some exposure.

3) Help you know when your company has a potential or actual legal problem and should call a lawyer.

Please note that this is merely an introductory class. This class will not make you a lawyer. You are advised to seek legal representation if and when you or your company encounters a legal issue.

Additionally, this is an educational class, not legal representation. Consequently, nothing in the class materials, lectures, office hours, or any other materials or communication is to be taken as providing any legal advice whatsoever with regard to any real-life situation. Further, although I am a practicing attorney, nothing in the materials, lectures, office hours, or any other materials or communications should be construed to create an attorney-client relationship of any sort.

Substance of the Class

Substantively, the class is divided into three sections, 1) Basics of the legal system including sources of law and enforcing laws and agreements in court, 2) Contracts and Torts, and 3) Intellectual Property. Each of the three sections will be the primary focus of one of the In-Class Exams described above.

An overall outline of the course appears on the subsequent pages.
I. Basics of the Legal System
   A. Sources of Law
      1. Constitutional Law
      2. Federal Statutes
      3. Treaties
      4. State Constitution
      5. State Laws
      6. Agencies – Federal and State
      7. Professional Licensing
      8. Standards Setting Bodies
      9. Company Policy
   B. The Court System – Enforcing Laws and Agreements
      1. Structure of the Court System
         a. Federal
         b. State
      2. Anatomy of a Lawsuit
      3. Complaint
      4. Jurisdiction and Venue
      5. Answer
      6. Discovery
      7. Settlement
      8. Trial
      9. Appeal
     10. Injunctions
II. Contracts
   A. Introduction to Contracts
   B. Parties
   C. Offer and Acceptance
   D. Mistake, Misrepresentation, and Fraud
   E. Duress and Undue Influence
   F. Consideration
   G. Enforceability
      1. Statute of Frauds
      2. Lawful Subject Matter
   H. Performance, Breach, and Remedies
   I. Warranties
III. Torts
   A. Intentional Torts
   B. Negligence
   C. Fraud
   D. False Advertising
   E. Products Liability
IV. Intellectual Property
   A. Overview and Theory of Intellectual Property
      1. US Rights
      2. Foreign Rights
      3. Function vs. Expression
   B. Patents
      1. The Patenting Process
      2. Review of Sample Patents
      3. Patentable Subject Matter
      4. Novelty
      5. Non-Obviousness
      6. 35 U.S.C. Sec. 112
      7. Claim Types
      8. Novelty vs. Infringement Analysis
      9. Design Patents
   C. Copyrights
   D. Trademarks

V. Engineering Work In A Legal Context
<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Read Before Class</th>
<th>Class Topic</th>
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<tbody>
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<td>Jan 28</td>
<td>Gayton, Chapter 3</td>
<td>I. Basics of the Legal System</td>
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<td><a href="http://www.joobarich.com">www.joobarich.com</a></td>
<td>1. Constitutional Law</td>
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<td>4. State Constitution</td>
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<td>5. State Laws</td>
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<td>I. Basics of the Legal System</td>
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<td>Materials at:</td>
<td>6. Agencies – Federal and</td>
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<td>Review Exam #1</td>
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<td>13 Apr</td>
<td>Gayton, Chapter 22</td>
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<td>V. Engineering Work In A Legal Context</td>
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