

# Forbes

## USC Sees The Future With New Course Offering

By Marshall Phelps

**Remember that scene in the 1967 movie *The Graduate* when Mr. McGuire (Walter Brooke) offers career advice to a young Benjamin Braddock (Dustin Hoffman)?** “Plastics!” he says. “There’s a great future in plastics.”

Half a century later, intellectual property is the new watchword for almost any career of the future. The only problem is, most of our higher education institutions haven’t gotten the memo yet, and that’s a real bummer for young people. Here’s why:

Intellectual property (IP) now accounts for a whopping 38.2% of total U.S. GDP and 30% of total national employment. Yet despite IP’s enormous role in the U.S. economy, almost no American universities offer any undergraduate courses on the basic workings of patents, copyrights, trademarks and trade secrets in U.S. social and economic life.

This “IP education gap” poses a real threat to U.S. leadership of the 21st century knowledge economy. To understand why, just imagine how U.S. leadership of the industrial economy of one hundred years ago would have been hamstrung had there been no Wharton School or Forbes or Harvard Business Review to teach industrial management and the organization of mass production enterprises to 20th century business leaders. Similar stakes exist today.

That’s why it’s such good news that the



**Dr. Gary Michelson** Source: *Michelson 20MM Foundation*

University of Southern California (USC) has stepped forward with a first-of-its-kind course for general undergraduates on the basics of IP. This new program, launched by the Greif Center for Entrepreneurial Studies within USC’s Marshall School of Business, will train tomorrow’s leaders in the skills they need to navigate our IP-driven economy. If successful, it will be rolled out to some 40 other colleges and universities nationwide.

Pioneered by USC President C. L. Max Nikias and billionaire medical inventor Dr. Gary Michelson, USC’s new undergrad course — named “*The Entrepreneur’s Guide to Intellectual Property*” — launched this

fall semester. Taught by Kirkland & Ellis partner Luke Dauchot, this innovative new course has already attracted a who’s who of IP luminaries as guest speakers.

These include former Patent Office director David Kappos, long-time Google head of patents and current Facebook IP chief Allen Lo, Dolby’s General Counsel Andy Sherman, Chinese smartphone maker Xiaomi’s chief of IP strategy Paul Lin, and a dozen of the senior-most IP leaders of Apple, Nike, Teva Pharmaceuticals, Dollar Shave, and other high-flying IP-intensive companies.

Aside from the core text, the lectures, and the guest speakers, the USC course also provides students with a fascinating series of animated three-minute videos that deal with common everyday patent, trademark, and copyright issues in business.

It’s hard to over-stress how big a breakthrough this USC IP course is. Until recently, intellectual property had been taught only in law schools or the occasional business school seminar. But as the new knowledge economy has gained strength over the last 40 years, IP-protected innovation has superseded industrial might to become the principal driver of corporate value and national economic growth. This has transformed IP from a narrowly-specialized legal field into a major force in American social and economic life.

If you think about it, patent, trademark, copyright, and trade secret issues now shape many arenas of modern life today. Look, for example, at how the smartphone wars determined winners and losers in the wireless industry, or how the recent *Slants and Redskins* Supreme Court cases have overturned traditional trademark practice. How about the way the *Blurred Lines* copyright infringement case against Robin Thicke and Pharrell Williams altered contemporary music production practices, or how the Waymo trade secret battle helped force a leadership shakeup at Uber?

From Silicon Valley startups and Fortune 500 board rooms to Wall Street investment decisions and President Trump's high-stakes talks with China's President Xi Jinping this month regarding the theft of U.S. intellectual property, IP has clearly become a subject of vital importance to all Americans, not just those in the legal profession.

And as a result, any young person who doesn't grasp at least the basics of intellectual property may find him or herself at a major disadvantage in the world of tomorrow.

For Dr. Nikias, this new IP course reflects his dogged determination to see that USC continues to educate the future leaders of America's IP-centered economy. Its top-ranked School of Cinematic Arts, for example, already produces many of the finest talents in the copyright-intensive Hollywood film and television industry.

"We believe USC's new course will set the standard for top-flight IP education for

undergrads," says Dr. Nikias, who holds eight patents in digital signal processing and is a charter fellow of the National Academy of Inventors (NAI). "This kind of training is critical for our nation's future competitiveness in the world, and we hope our initiative will encourage a broad range of other colleges and universities to follow suit."

For Dr. Michelson, the course helps fulfill a promise he made to his crippled grandmother half a century ago to find cures for disease. She suffered from syringomyelia, a crippling spinal disease that results in terrible back pain and the loss of sensation to pain and temperature in the extremities, especially the hands.

"She always told me, 'One day you'll become a doctor and you'll fix me,'" Dr. Michelson recalls. Although he wasn't able to help his grandmother, he did invent hundreds of medical tools and techniques that transformed spinal surgery worldwide over the course of his career. And while inventing these new tools, he learned early on that he needed to patent his inventions to protect the time and resources he had invested to develop them.

"If you don't patent your inventions, especially in a competitive industry like medical devices, others will simply copy them and sell at a lower cost because they didn't have to invest anything to develop them in the first place," he argues. "That's a great way to drive the real innovators out of an industry and halt any further technical advances."

Dr. Michelson's inventions became so widely adopted that in 2005 the medical

device giant Medtronic purchased the majority of his patent portfolio of spinal surgery inventions for \$1.35 billion. Having retired from medical practice, he now devotes his energy and philanthropy to helping develop new solutions to a wide range of medical problems.

But he firmly believes that without a working knowledge of intellectual property and the ability to patent their discoveries, tomorrow's young inventors will not be able to raise the money to cure disease or bring those cures to market.

USC's new IP course is not the only one taught outside of law school. The University of Colorado at Colorado Springs (UCCS) offers a Bachelor of Innovation™ degree that also requires IP courses of its undergraduates. According to Dr. Terry Boulton, who founded the program and teaches over 100 students in his IP law class, "These classes are very hands on. They help students understand the patent application process and then work with actual startups in the community to help them handle their IP challenges."

Every major new industry of the last 150 years — from the automobile and aircraft businesses to semiconductors, personal computers, software, biotech, mobile telephony, and Internet e-commerce — was launched on the back of an IP-protected innovation.

It's time higher education developed a curriculum to ensure that the same thing happens in the next 100 years, and USC's and UCCS's IP programs are big steps in the right direction.

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