

FALL 2022

IMPACT OF MATERIALS ON SOCIETY (#UF_IMOS) Interdisciplinary Engineering & Liberal Arts Course

EMA 1004/CLA 3930 - MWF 3rd period Pugh Hall 170

* No prerequisites required. Suitable for students pursuing any major.



How have past material discoveries changed the world we live in?

How do new materials innovations effect everyday life?

How do social and cultural forces shape engineering?

What future materials innovations will revolutionize your world?

We look at how materials -- such as ceramics, concrete, precious metals, glass, steel, plastics and semiconductors -- contributed to the development of technologies and social structures worldwide. We investigate cutting-edge materials and discuss their future impact on medicine, transportation, clean energy, sustainability, water, and more. We discuss how cultural variables like gender, race, power/authority, religious beliefs, and politics shape the development of materials for engineering. From Roman baths, steel foundries and Tupperware parties, to microelectronics, nanomedicine, renewable energy and virtual communities, we examine case studies from the past to imagine the future social impacts of new materials.

This elective course is for:

- Everyone who wants to understand how our world is shaped by materials.
- Future engineers who want to understand how society could impact their innovations.

Instructors:

- Prof. Kevin Jones (Materials Science and Engineering): kjones@eng.ufl.edu
- With many other faculty experts from sociology, anthropology, history, classics and English

Cool Fact: This class was named the Most Innovative Class in Materials in the Country in 2018