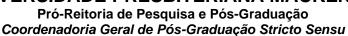


UNIVERSIDADE PRESBITERIANA MACKENZIE





Course Syllabus

Department/Faculty: School of Engineering Graduate Program: Materials Engineering and Nanotechnology			
Course Name: Carbon Nanomaterials			
Professor:			
Office hours: 48			
Course Overview:			
This course will cover to	•	of carbon nanomaterials (fullerenes, na	anotubes,

Topics outline:

- Epistemological, chemical, and physical foundations related to carbon nanomaterials;
- · Properties of carbon nanomaterials;
- Production processes of different carbon nanomaterials;
- Applications of carbon nanomaterials.

Letter Grade Assignment:

Grade A (Excellent) - Grade points between 9 and 10

Grade B (Good) - Grade points between 8 and 8.9

Grade C (Satisfactory) - Grade points between 7 and 7.9

Grade D (Unsatisfactory) - Grade points between 0 and 6.9

Texts, Materials, and supplies:

Basic Bibliography

JORIO, A.; DRESSELHAUS, G.; DRESSELHAUS, M. S.; Carbon nanotubes: advanced topics in the synthesis, structure, properties, and applications, Berlin: Springer, 2008.

KROTO, H. W.; WALTON, D. R. M.; *The fullerenes: new horizons for the chemistry, physics and astrophysics of carbon*, Cambridge: Cambridge University Press, 1997.

RAO C. N. R.; SOOD A. K.; *Graphene: Synthesis, Properties and Phenomena*, Weinheim: Wiley-VCH, 2012.

GOGOTSI Y.; PRESSER V.; Carbon Nanomaterials, Second Edition (Advanced Materials and Technologies), Boca Raton: CRC Press, 2013.

Review articles

DONG, L.; YANG, J.; CHHOWALLA, M.; LOH, K. P., Synthesis and reduction of large sized graphene oxide sheets. Chemical Society Reviews 2017, 46 (23), 7306-7316.

MINERS, S. A.; RANCE, G. A.; KHLOBYSTOV, A. N., *Chemical reactions confined within carbon nanotubes*. Chemical Society Reviews 2016, 45 (17), 4727-4746.