



UNIVERSITY OF CALGARY  
FACULTY OF SCIENCE  
NANOSCIENCE PROGRAM  
COURSE SYLLABUS  
WINTER 2018

**1. Course:** Nanoscience 401, Design in nanoscience

Lecture Sections:

L01: TuTh 6:00 pm - 7:15 pm, SA 235

Instructor	Office	Tel. No.	e-mail address	Office hours
Dr. Max Anikovskiy	EEEL 237A	(403) 220-3115	<a href="mailto:m.anikovskiy@ucalgary.ca">m.anikovskiy@ucalgary.ca</a>	By appointment

Desire 2 Learn (D2L) Nanoscience 401

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To avoid IT problems, it is recommended that the students use their U of C account for all course correspondence.

**2. Course Description:**

**Lectures:** The fundamental understanding of Nanoscience gained in Nanoscience 301 will be extended and applied to designing experiments and simulations to test hypotheses regarding Nanoscience.

**3. Topics Covered:**

Experimental design

Nanoparticle synthesis

Dynamic Light Scattering

UV-Vis and Fluorescence spectroscopy

Confocal microscopy and Fluorescence Correlation Spectroscopy

Fluorescence Cross Correlation Spectroscopy

Atomic Force Microscopy

Electron microscopy

Nanolithography

Program Director's Approval:

Approved by Program Director

Date: January 4<sup>th</sup>, 2018