

Date	Day	Time	Lecture Topics	Tutorial	Quiz
July, 31	Sunday	8:30-11:30	Introduction to Nanotechnology, Part 1	Presenting the course assignments, the MOODLE environment, and relevant resources of information	1
August, 1	Monday	8:30-11:30	Introduction to Nanotechnology, Part 2	Guided reading and working on Open-ended question 1	2
August, 2	Tuesday	8:30-11:30	Introduction to Sensors' Science and Technology	<i>Open-ended question 1</i> completion and submission	3
August, 3	Wednesday	8:30-11:30	Metal Nanoparticles-based Sensors (3 hours)		4
August, 7	Sunday	8:30-11:30	Quantum Dots Sensor	Guided reading and working on Mini Project	5
August, 8	Monday	8:30-11:30	Nanowire-based Sensors	working on Mini Project	6
August, 9	Tuesday	8:30-11:30	Carbon Nanotube-based Sensors	<i>Mini Project</i> completion and submission	7
August, 10	Wednesday	8:30-11:30	Sensors based on Nanostructures of Metal Oxide (3 hours)		8
August, 14	Sunday	8:30-11:30	Sensors based on Polymeric Nanostructures	Lab tour	9
August, 15	Monday	8:30-11:30	Electronic Skin based on Nanotechnology	Final project, (stages 1-2)	10
August, 16	Tuesday	8:30-11:30	Electronic Skin based on Nanotechnology and discussion	Final project, (stages 3-4)	
August, 18	Thursday	8:30-10:30		Final project, (stages 4-5)	

August, 22	Monday	8:30-10:30	Working on the final project and open discussion
August, 24	Wednesday	TBD	Project Presentation (stage 6)

Stages for designing a project

	<i>Stage</i>	<i>Description</i>	<i>Implementation process</i>
1	Project goal	Identifying a problem and its need for a solution.	<ol style="list-style-type: none"> 1. Discussing the problem among peers in small groups 2. Documenting meeting proceedings: creative, but yet applicable, ideas.
2	Problem analysis	Defining and analyzing scientific, engineering, and social aspects of the problem.	<ol style="list-style-type: none"> 1. Searching multiple information sources (based on the guided reading sessions and lab visits). 2. Documenting alternative ideas to solve the problem, emphasizing nanotechnology principles and considering innovations in nanosensors.
3	Design	Evaluating the different ideas and designing a solution to meet the defined problem.	<ol style="list-style-type: none"> 1. Brainstorming to decide upon the best solution for the problem. 2. Documenting the design framework.
4	Preparation	Planning the project and assigning tasks for each team member. Discussing ways for monitoring work progress.	<ol style="list-style-type: none"> 1. Planning time schedule by setting milestones 2. Allocating roles and tasks to group members 3. Documenting all activities and decisions
5	Document construction	Constructing the first draft of the written project and the poster (PPT slide 70*100 cm).	<ol style="list-style-type: none"> 1. Writing the first draft of the document. 2. Developing the poster (PPT slide 70*100 cm)/ presentation. 3. Refining construction where necessary after redesigning.
6	Presentation	Presenting the poster and conducting peer evaluation.	<ol style="list-style-type: none"> 1. Presenting projects' goal, design, and initial conclusions. 2. Providing comments and feedback according to scoring rubrics to improve peers' projects.
7	Final Report	Writing and submitting the final report.	<ol style="list-style-type: none"> 1. Writing the document according to the course requirements. 2. Summarizing the learning experience and writing conclusions.