

HST 100 – Respiratory Pathophysiology

Course Summary:

Course Directors:

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Histology, cell biology, and physiological function of the lung with multiple examples related to common diseases of the lung. Quantitative approach to the physics of gases, respiratory mechanics, and gas exchange used to explain pathological mechanisms. Use of medical ventilators is discussed in lecture and in laboratory experiences. For MD candidates and other students with background in science.

Date	Details	
Tue Feb 5, 2019	Introduction - Hardin	10:30am to 10:40am
	Overview-Hardin	10:40am to 10:45am
	Normal Chest Radiology-Sharma	10:45am to 11:30am
	Introduction to Pulmonary Mechanics - Hibbert	11:40am to 12:20pm
Thu Feb 7, 2019	Lung Volumes, Tidal Volume, Dead Space, Atmosphere-Hibbert	10:30am to 11:10am
	Normal Pulmonary Anatomy and Histology - Hariri	11:30am to 12:20pm
Tue Feb 12, 2019	Mechanics of Breathing-Roche	10:30am to 11:20am
	Problem Set #1	due by 10:30am
	Lung Ventilation Demonstration - Roche	11:30am to 12:20pm
	TA Review	5pm to 6:30pm
Thu Feb 14, 2019	Section-Ventilation & Mechanics of Assisted Ventilation	10:30am to 12:20pm

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Tue Feb 19, 2019	Flow Limitation - Butler	10:30am to 11:25am
	Diffusion and O ₂ -CO ₂ Transport-Hardin	11:30am to 12:20pm
Thu Feb 21, 2019	Pulmonary Circulation and V/Q - Hardin	10:30am to 12:20pm
	Problem Set #2	due by 10:30am
Tue Feb 26, 2019	Section 2 - Flow Limitation, Diffusion, Pulmonary Circulation	10:30am to 12:20pm
Thu Feb 28, 2019	Clinical Gas Exchange - Hardin	10:30am to 11:25pm
	High Altitude-Hardin,Roche,Hibbert	11:30am to 12:20pm
Tue Mar 5, 2019	Section 3 - V/Q, High Altitude. Clinical Gas Exchange	10:30am to 12:20pm
Thu Mar 7, 2019	Parenchyma I and II - Fredberg	10:30am to 12:20pm
	Problem Set #3	due by 11:59pm
Sun Mar 10, 2019	TA Review	5pm to 6:30pm
Tue Mar 12, 2019	PFTs - Hardin	10:30am to 11:25am
	Pneumothorax - Henske	11:30am to 12:20pm
Thu Mar 14, 2019	Midterm Review	10:30am to 11:25am

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Tue Mar 19, 2019	IPF - Montesi	11:30am to 12:20pm
Thu Mar 21, 2019	Section 4 - Parenchyma & Midterm Review	10:30am to 12:20pm
Tue Mar 26, 2019	Midterm Examination	10:30am to 12:20pm
	Intro to the Second Half of the Course - Roche	10:30am to 10:40am
	Lung Cancer Biology - Oxnard	10:40am to 11:25am
	Research Talk - Roche	11:30am to 12:20pm
Thu Mar 28, 2019	Biology of Asthma, Its Treatment & Ethics of Clinical Trials in Asthma - Drazen	10:30am to 12:20pm
Tue Apr 2, 2019	Restrictive Diseases, Obstructive Diseases & Lung Cancer Pathology - Hariri	10:30am to 12:20pm
Thu Apr 4, 2019	PFT Lab - Various Hospital Sites	10:30am to 12:20pm
Tue Apr 9, 2019	Introduction to the CPC-Hardin	9am to 9:05am
	Chest Wall I & II- Baedorf Kassis	9:05am to 10:05am
	Chest Wall III - Baedorf Kassis	10:10am to 10:50am
Thu Apr 11, 2019	Respiratory Control and Sensation - Schwartzstein	8:30am to 9:30am
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	COPD-Washko	9:30am to 10:30am

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	COPD - Washko	9:30am to 10:25am
Tue Apr 23, 2019	X-Ray Pathology- Sharma	9am to 9:55am
	Pneumonia-Baden	10am to 10:50am
Thu Apr 25, 2019	Cystic Fibrosis-Richards	9am to 9:55am
	Pulmonary Vascular Disease-Witkin	10am to 10:50am
Tue Apr 30, 2019	Section 5- Chest Wall & PFTs	9am to 10:50am
Thu May 2, 2019	Exercise - Hardin	9am to 9:55am
	ARDS - Hibbert	10am to 10:50am
Tue May 7, 2019	Sleep & Sleep Disordered Breathing- Rosen	9am to 9:55am
	Course Summary & Disease Summary- Hardin	10am to 10:50am
Thu May 9, 2019	Clinical Pathological Case Discussions by Students-Hardin, Roche, Hibbert	9am to 10:50am
Thu May 16, 2019	Final Exam	9am to 10:50am