

Schedule for HL2040: Fall 2020

Place	Week/Day/Time	Lectures/ Demos/ Seminars	Attendance	Teacher(s)
	Week 36	Introduction		
Zoom link: https://kth-se.zoom.us/j/526822397	Wednesday, 2/9 9:00 – 13:00	Lecture X Recapitulation of basics in: <ul style="list-style-type: none"> • Physics & nomenclature • Anatomy & Physiology 	Mandatory	Ola Eiken, Mikael Gennser & Michail Keramidas
Berzelius väg 13, Solna (located at campus Karolinska Institute)	Thursday, 3/9 8:30 – 16:00	Medical Examination for participation in the demos	Mandatory for those who aim to participate in the demos	Ola Eiken & Michail Keramidas
	Week 37	Teaching Block: Diving Physiology		
Zoom link: https://kth-se.zoom.us/my/gennser123	Monday, 7/9 9:00 – 12:00	Lecture 1a <ul style="list-style-type: none"> • Basic re. diving & submarine activities • Problems related to: <ul style="list-style-type: none"> - Free diving & immersion - Scuba diving & depth: gas density, CO retention, nitrogen narcosis, HPNS, O₂ toxicity • Countermeasures 	<i>Optional, but highly recommended</i>	Mikael Gennser
Zoom link: https://kth-se.zoom.us/my/gennser123	Tuesday, 8/9 9:00 – 12:00	Lecture 1b <ul style="list-style-type: none"> • Problems related to: <ul style="list-style-type: none"> - Decompression: <ul style="list-style-type: none"> ○ Barotrauma ○ Decompression sickness ○ Bone necrosis etc. - Diving in a submarine • Countermeasures 	<i>Optional, but highly recommended</i>	Mikael Gennser & Antonis Elia
Berzelius väg 13, Solna (located at campus Karolinska Institute)	Thursday, 10/9 9:00 – 13:00	Demo 1 Hyperbaric pressure chamber	<i>Optional, but highly recommended</i>	Mikael Gennser, Antonis Elia, Ola Eiken, Björn Johannesson, Anders Berggren
Zoom link: https://kth-se.zoom.us/my/gennser123	Friday, 11/9 9.00-11.00	Seminar 1 - Group A*	Mandatory	Mikael Gennser, Antonis Elia & Ola Eiken
Zoom link: https://kth-se.zoom.us/my/gennser123	Friday, 11/9 14.00-16.00	Seminar 1 - Group B*		
	Week 38	Teaching Block: High-Altitude Physiology		
Zoom link: https://kth-se.zoom.us/j/5604640678	Monday, 14/9 9:00 – 11:00	Lecture 2a <ul style="list-style-type: none"> • Basics re. high-altitude physiology • Problems related to: <ul style="list-style-type: none"> - Decompression - Acute hypoxia: <ul style="list-style-type: none"> ○ Physical capacity ○ Mental capacity • Subacute hypoxia: AMS, HAP, HACE 	<i>Optional, but highly recommended</i>	Michail Keramidas
Zoom link: https://kth-se.zoom.us/j/5604640678	Tuesday, 15/9 9.00-11.00	Lecture 2b <ul style="list-style-type: none"> • Problems related to: <ul style="list-style-type: none"> - Chronic hypoxia: <ul style="list-style-type: none"> ○ Monges disease 	<i>Optional, but highly recommended</i>	Michail Keramidas

Schedule for HL2040: Fall 2020

		<ul style="list-style-type: none"> ○ COPD & respiratory insufficiency • High-altitude training • Countermeasures 		
Berzelius väg 13, Solna (located at campus Karolinska Institute)	Thursday, 17/9 9.00-13.00	Demo 2 Hypobaric pressure chamber	<i>Optional, but highly recommended</i>	Michail Keramidas, Ola Eiken, Björn Johannesson & Anders Berggren
Zoom link: https://kth-se.zoom.us/j/5604640678	Friday, 18/9 9.00-11.00	Seminar 2 - Group A*	Mandatory	Michail Keramidas & Ola Eiken
Zoom link: https://kth-se.zoom.us/j/5604640678	Friday, 18/9 14.00-16.00	Seminar 2 - Group B*		
	Week 39	Teaching Block: Acceleration Physiology		
Zoom link: https://kth-se.zoom.us/j/526822397	Monday, 21/9 9.00-12.00	Lecture 3a <ul style="list-style-type: none"> • Basics re. high-performance aircraft • Problems related to high G: <ul style="list-style-type: none"> - Cardiovascular - Respiratory - Musculoskeletal - Vestibular/Spatial disorientation • Countermeasures 	<i>Optional, but highly recommended</i>	Ola Eiken
Zoom link: https://kth-se.zoom.us/j/4206330702	Tuesday, 22/9 9.00-12.00	Lecture 3b <ul style="list-style-type: none"> • Basics re. space missions • Problems related to reduced G: <ul style="list-style-type: none"> - Cardiovascular - Respiratory - Musculoskeletal - Vestibular/space motion sickness • Countermeasures 	<i>Optional, but highly recommended</i>	Roger Kölegård & Ola Eiken
Berzelius väg 13, Solna (located at campus Karolinska Institute)	Thursday, 24/9 9.00-13.00	Demo 3 Human-use centrifuge	<i>Optional, but highly recommended</i>	Ola Eiken, Roger Kölegård, Anders Berggren & Björn Johannesson
Zoom link: https://kth-se.zoom.us/j/4206330702	Friday, 25/9 9.00-11.00	Seminar 3 - Group A*	Mandatory	Ola Eiken & Roger Kölegård
Zoom link: https://kth-se.zoom.us/j/4206330702	Friday, 25/9 14.00-16.00	Seminar 3 - Group B*		
	Week 40	Teaching Block: Thermal Physiology		
Zoom link: https://kth-se.zoom.us/j/6935644355	Monday, 28/9 9.00-12.00	Lecture 4a <ul style="list-style-type: none"> • Basics • Problems related to heat stress <ul style="list-style-type: none"> - Thermoregulation during exercise - Heat stroke, heat-induced: syncope, cramps, fever • Countermeasures 	<i>Optional, but highly recommended</i>	Mikael Grönkvist
Zoom link: https://kth-se.zoom.us/j/6935644355	Tuesday, 29/9 9.00-11.00	Lecture 4b <ul style="list-style-type: none"> • Problems related to cold stress <ul style="list-style-type: none"> - Hypothermia 	<i>Optional, but highly recommended</i>	Lena Norrbrand

Schedule for HL2040: Fall 2020

se.zoom.us/j/8241190546		<ul style="list-style-type: none"> - Local cold injuries • Countermeasures 		
Berzelius väg 13, Solna (located at campus Karolinska Institute)	Thursday, 1/10 9.00-13.00	Demo 4 Local cold exposure	<i>Optional, but highly recommended</i>	Lena Norrbrand & Roger Kölegård
Zoom link: https://kth-se.zoom.us/j/8241190546	Friday, 2/10 9.00-11.00	Seminar 4 - Group A*	Mandatory	Mikael Grönkvist, Lena Norrbrand, & Ola Eiken
Zoom link: https://kth-se.zoom.us/j/8241190546	Friday, 2/10 14.00-16.00	Seminar 4 - Group B*		
Zoom link: <i>to be announced</i>	Friday, 23/10 8.00-11.00	Written Examination	Mandatory	
Zoom link: <i>to be announced</i>	Wednesday, 16/12 8.00-11.00	Re-written Examination	Mandatory	

* The individual appointments for the medical examinations will be announced on Canvas before the 1st lecture.

* The groups for the Seminars and the Demos will be announced on Canvas immediately after the 1st Lecture.