

Lívfrøði 2025–2026 (Biology 2025–2026)

Tilfar: <https://livfrodi.portal.nam.fo/>

Lærari: Alyssa Eliassen

Evnið Topic	Kapittul Chapters	Undirevni subtopics
Eukaryotar kyknur <i>Eukaryotic Cells</i>	Kap. 1 Kyknan við kyknukjarna <i>Chapter 1: The Cell with a Nucleus</i>	<ul style="list-style-type: none">• Frá prokaryotum til eukaryotar (From prokaryotes to eukaryotes)• Munir og líkleikar (Differences and similarities)• Dýra- og plantukyknur (Animal and plant cells)
	Kap. 2 Membranir og kyknuveggir <i>Chapter 2: Membranes and Cell Walls</i> Some helpful videos that discuss some of these topics → 1. Overview of Cell transport by Nucleus Biology: https://www.youtube.com/watch?v=3k7Y6NcXe6s 2. Cell biology: Active transport by Nucleus Biology: https://www.youtube.com/watch?v=5asMngTQqxQ	<ul style="list-style-type: none">• Kyknuveggurin (The cell wall)• Kyknumembranin (The cell membrane)• Flutningur gjøgnum membranina (Transport through the membrane)• Passivur og aktivur flutningur (Passive and active transport)• Eksosytosa og endosytosa (Exocytosis and endocytosis)
	Kap. 3 Inni í kyknuni <i>Chapter 3: Inside the Cell</i> Some helpful videos that discuss some of these topics → 1. Cell structure by Nucleus Medical Media: https://www.youtube.com/watch?v=URUJD5NEXC8 2. Ribosomes: structure and function by Joao's Lab: https://www.youtube.com/watch?v=USiOadeNEH0	<ul style="list-style-type: none">• Kjarnin í øllum (The nucleus in everything)• DNA og kromosom (DNA and chromosomes)• Sytoskrokkurin (The cytoplasm)• Mitokondriur (Mitochondria)• Ribosom (Ribosomes)
	Kap. 4 Proteinverksmiðjan <i>Chapter 4: The Protein Factory</i> helpful video that discusses some of these topics →	<ul style="list-style-type: none">• Týðningarmesta uppgáva hjá kyknuni (The most important task of the cell)• Proteinsyntesan (Protein synthesis)• RNA (RNA)

	<ol style="list-style-type: none"> 1. Protein synthesis in simple terms: https://www.youtube.com/watch?v=s7YTmaC_wvU 2. Functions of protein in the body https://www.youtube.com/watch?v=V_E7mq8bv4g 	<ul style="list-style-type: none"> • Tripletir (Triplets/codons) • Proteintillaging (Protein production) • Golgiapparatið (The Golgi apparatus) • Hvat verða proteinini brúkt til? (What are proteins used for?)
Ílegurnar ráða Genes Rule	Kap. 1 Uppskriftin uppá teg <i>Chapter 1: The Recipe for You</i> Some helpful videos that discuss some of these topics → <ol style="list-style-type: none"> 1. What is a Chromosome? https://www.youtube.com/watch?v=lePMXxQ-KWY 2. What is genes, DNA and chromosomes https://www.youtube.com/watch?v=hywRdDVR76A 3. What are genes? (The recipe for you related) https://www.youtube.com/watch?v=MaYQ5D8FTBU 	<ul style="list-style-type: none"> • Hvörjum líkist tú? (Who do you resemble?) • Kyknan og kjarnin í öllum (The cell and the nucleus) • Kromosom (Chromosomes) • Ílegurnar (Genes) • Ber til at síggja kromosomini? (Can you see chromosomes?) • Kyknugögn (Cell organelles)
	Kap. 2 Kyknubýti <i>Chapter 2: Cell Division</i> <ol style="list-style-type: none"> 1. What is Cell division: meiosis vs. Mitosis https://www.youtube.com/shorts/9MQaS-V8UXE 2. Cell division (meiosis vs mitosis) and the cell cycle https://www.youtube.com/watch?v=-PfvNZedmGA 	<ul style="list-style-type: none"> • Kyknurnar býta seg sundur (Cells divide) • Ymisk kyknubýti (Different kinds of cell division) • Vakstrarbýti (mitosa) (Growth division / mitosis) • Kynskyknubýti (meiosa) (Sex cell division / meiosis) • Kyknudifferentiering (Cell differentiation)
	Kap. 3 Arvaligir eginleikar, og hvat ber til at siga frammanundan <i>Chapter 3: Hereditary Traits and What Can Be Predicted</i> Some helpful videos that discuss some of these topics → <ol style="list-style-type: none"> 1. What is homozygous vs Heterozygous? https://www.youtube.com/watch?v=AxCi 	<ul style="list-style-type: none"> • Ráðandi, felagsráðandi og víkjandi ílegur (Dominant, co-dominant and recessive genes) • Gregor Mendel og ertnablómurnar (Gregor Mendel and the pea plants) • Kynkrossingartalvur (Punnett squares) • Homozygotar ella heterozygotar allellir

	<p>C-ZjF c</p> <p>2. Dominant and recessive genes https://www.youtube.com/watch?v=ig2eeOWGIYY</p> <p>3. https://www.youtube.com/watch?v=1-SHXC1Kwww</p>	<p>(Homozygous or heterozygous alleles)</p> <ul style="list-style-type: none"> • Felagsráðandi ílegur (Co-dominant genes)
	<p>Kap. 4 Tá alt ekki gongst eftir uppskriftini...</p> <p>Chapter 4: When Everything Does Not Go According to the Recipe...</p> <p>Some helpful videos that discuss some of these topics →</p> <p>1. Mutation https://www.youtube.com/watch?v=vl6Vlf2thvI</p>	<ul style="list-style-type: none"> • Mutatiónir og mutantar (Mutations and mutants) • Tá ið ein av kubbunum er skeivur (When one of the building blocks is wrong) • Kromosommutatiónir (Chromosome mutations)
	<p>Kap. 5 Íleguviðgerð</p> <p>Chapter 5: Gene Therapy</p>	<ul style="list-style-type: none"> • Íleguflutningur (Gene transfer) • Upprunakyknur (Stem cells)
<p>Blóðrensl og andaráttur</p> <p><i>Blood circulation and Respiration</i></p>	<p>Kap. 1 Andaleið</p> <p>Chapter 1: Respiratory System</p> <p>Some helpful videos that discuss some of these topics →</p> <p>1. The human respiratory system https://www.youtube.com/watch?v=nCxN-k9bK5w</p> <p>2. How the oxygen you breathe gets delivered to the cells of your body https://www.youtube.com/watch?v=FJQxriDWkMs</p>	<ul style="list-style-type: none"> • Lungu og respiratión (Lungs and respiration) • Andaleiðin (The respiratory tract) • Roykjaralungu (Smoker's lungs)
	<p>Kap. 2 Hjarta og blóðæðrar</p> <p>Chapter 2: Heart and Blood Vessels</p> <p>Some helpful videos that discuss some of these topics →</p>	<ul style="list-style-type: none"> • Ein virkin pumpa (An active pump) • Blóðæðrar (Blood vessels) • Eitt blóðugt umfar (Blood circulation) • Reinsiverk kropsins (The body's cleansing system)

	<ol style="list-style-type: none"> 1. <i>The circulatory system and the heart</i> https://www.youtube.com/watch?v=31nyaBdC-q8&t=244s 2. <i>The bloods journey</i> https://www.youtube.com/watch?v=5EiDGEJPK70 3. <i>Blood groups</i> https://www.youtube.com/watch?v=vOckth8ZEO4 	<ul style="list-style-type: none"> • <i>Blóðflokkar (Blood groups)</i>
	<p>Kap. 3 Fingurin á pulsinn</p> <p><i>Chapter 3: Finger on the Pulse</i></p> <p>Some helpful videos that discuss some of these topics →</p> <ol style="list-style-type: none"> 1. <i>Clogged arteries and atherosclerosis</i> https://www.youtube.com/watch?v=y6QJceOAVY0 2. <i>Blood pressure</i> https://www.youtube.com/watch?v=Ab9OZsDECZw 	<ul style="list-style-type: none"> • <i>Rørsla gefur orku (Exercise gives energy)</i> • <i>Blóðtrýtið (Blood pressure)</i> • <i>Æðrakálfing (Atherosclerosis / hardening of the arteries)</i>
<p>Immunverjan</p> <p><i>The Immune System</i></p>	<p>Kap. 1 Hvussu tekur ígerð seg upp?</p> <p><i>Chapter 1: How Does Infection Start?</i></p> <ol style="list-style-type: none"> 1. <i>Microorganisms</i> https://www.youtube.com/watch?v=YSitT0oOoyc 	<ul style="list-style-type: none"> • <i>Smáverurnar og tú (Microorganisms and you)</i> • <i>Smáverurnar leypa á (Microorganisms attack)</i>
	<p>Kap. 2 Immunverjan</p> <p><i>Chapter 2: The Immune System</i></p> <ol style="list-style-type: none"> 1. <i>The immune system</i> https://www.youtube.com/watch?v=zQG0cOUBi6s 	<ul style="list-style-type: none"> • <i>Stutt um verjuskipanina hjá kroppinum (About the body's defense system)</i> • <i>Kroppurin og verjuskipan hansara (The body and its defense system)</i> • <i>Viðfødða immunverjan (Innate immune system)</i> • <i>Tillærda immunverjan (Adaptive immune system)</i> • <i>Soleiðis virkar immunverjan (How the immune system works)</i>

	<p>Kap. 3 Fyrirbygging og leking</p> <p><i>Chapter 3: Prevention and Treatment</i></p> <ol style="list-style-type: none"> 1. Viruses vs. Bacteria / What's The Difference? - YouTube by Dr. Finch's Lab 2. Viral vs Bacterial Infection: What's the Difference? - Dr. Berg - YouTube by. Dr. Berg 3. How antibiotics work https://www.youtube.com/watch?v=x5WSRi1pBWg 	<ul style="list-style-type: none"> • <i>Tá ið sjúka rakar (When illness strikes)</i> • <i>Antibiotika (Antibiotics)</i> • <i>Virus vs. Bacteria (Viruses vs. bacteria)</i>
<p>Sex, svövnur og fagar fyrimyndir</p> <p><i>Sex, Sleep and Role Models</i></p>	<p>Kap. 1 Kynsbúning og kynssemi</p> <p><i>Chapter 1: Puberty and Sexuality</i></p> <p>Some helpful videos that discuss some of these topics →</p> <ol style="list-style-type: none"> 1. <i>What is puberty?</i> https://www.youtube.com/watch?v=TRyOcLSJDzk 2. <i>Puberty and hormones involved</i> https://www.youtube.com/watch?v=X1m4Dyr1N18 	<ul style="list-style-type: none"> • <i>Kennir tú tað aftur? (Do you recognize it?)</i> • <i>Sveitti og feittut hár? (Sweat and greasy hair?)</i> • <i>Tá ið gentur gerast kynsbúnar (When girls reach puberty)</i> • <i>Tá ið dreingir gerast kynsbúnir (When boys reach puberty)</i> • <i>Seksualitetur og kynssamleiki (Sexuality and gender identity)</i> • <i>Sex og systru ferð (Sex and risky behavior)</i> • <i>Fyrirbygging og kynssjúkur (Prevention and sexually transmitted diseases)</i>
	<p>Kap. 2 Sov blítt og søtt</p> <p><i>Chapter 2: Sleep Well</i></p>	<ul style="list-style-type: none"> • <i>A- og B-menniskju (A- and B-people / morning and evening people)</i> • <i>Svövnur er sunnur (Sleep is healthy)</i>
<p>Tú verður tað, tú etur</p> <p><i>You Are What You Eat</i></p>	<p>Kap. 1 Hvat er svongd?</p> <p><i>Chapter 1: What Is Hunger?</i></p>	<ul style="list-style-type: none"> • <i>Svongd kemur á okkum (We become hungry)</i> • <i>Tekin um mettu (Signs of fullness)</i>
	<p>Kap. 2 Kolvæta</p> <p><i>Chapter 2: Carbohydrates</i></p>	<ul style="list-style-type: none"> • <i>Stutt um kolvætu (About carbohydrates)</i> • <i>Monosakkarid (Monosaccharides)</i>

	<p>1. How do carbohydrates impact your health? By TED-Ed: https://www.youtube.com/watch?v=wxzc_2c6GMg</p>	<ul style="list-style-type: none"> • <i>Disakkarid (Disaccharides)</i> • <i>At kloyva disakkarid (Breaking down disaccharides)</i> • <i>Polysakkarid (Polysaccharides)</i> • <i>Blóðsukur (Blood sugar)</i> • <i>Insulin (Insulin)</i> • <i>Diabetes (Diabetes)</i> • <i>Tann skjóta og tann seina (The fast and the slow)</i> • <i>Glykemiska indeksið (The glycemic index)</i>
	<p>Kap. 3 Protein <i>Chapter 3: Protein</i></p> <p>1. What is protein? By RCSBProteinDataBank: https://www.youtube.com/watch?v=vwTv8TqWC48</p>	<ul style="list-style-type: none"> • <i>Aminosýrur í ketum (Amino acids in chains)</i> • <i>Proteinmýl verða lögð saman (Protein molecules are assembled)</i> • <i>pH-virði og temperaturur (pH value and temperature)</i>
	<p>Kap. 4 Fitievni <i>Chapter 4: Fats and Lipids</i></p> <p>1. What is fat? By Ted-Ed: https://www.youtube.com/watch?v=QhUrc4BnPgg</p> <p>2. Support: What are trans fat? https://www.youtube.com/watch?v=FwyTfv9183U</p>	<ul style="list-style-type: none"> • <i>Tað er feitt! (That is fat!)</i> • <i>Omega-3-fitisýrur (Omega-3 fatty acids)</i> • <i>Triglyserid (Triglycerides)</i> • <i>Transfitisýrur (Trans fats)</i> • <i>Kolesterol (Cholesterol)</i> • <i>Fiti er orka (Fat is energy)</i>
	<p>Kap. 5 Matvøruríkan og ílatingarevni <i>Chapter 5: Food Enrichment and Additives</i></p> <p>1. <i>Why is too much salt bad</i> https://www.youtube.com/watch?v=uM8yQNZ0x10&t=7s</p> <p>2. Hvat is probiotc by ISAPPScience: https://www.youtube.com/watch?v=C6j7F-lhtmQ</p>	<ul style="list-style-type: none"> • <i>Et salt afurvið... (Eatless salt/reduce salt intake)</i> • <i>Ríkaðar matvørur (Enriched foods)</i> • <i>Probiotika (Probiotics)</i> • <i>Ílatingarevni (Additives)</i> • <i>Funktiónellar matvørur (Functional foods)</i>

	<p>3. Functional foods explained: https://www.youtube.com/watch?v=ZhpCFZLPX0k</p>	
	<p>Kap. 6 Kostráð <i>Chapter 6: Dietary Advice</i></p> <p>1. <i>Balance diet</i> https://www.youtube.com/watch?v=NqV1Ig4_nfl</p>	<ul style="list-style-type: none"> • <i>Dagligt orkuát (Daily energy intake)</i> • <i>Gamlu kostvarðarnir (The old dietary guidelines)</i>