



Korea University International Summer Campus (KU ISC) 2023

Embark on a unique summer

June 27, 2023 ~ August 3, 2023

ISC103 – Introductory Life Science

I . Instructor

Professor	:	Dr. Chu-Young Kim
E-mail	:	ckim7@utep.edu
Home Institution	:	The University of Texas at El Paso
Class Time	:	6 Week, Period 1 (9:00am ~ 10:40am KST)
Office	:	TBD
Office Hours	:	By appointment

II. Textbook

Required Textbook	:	There is no textbook for this course.
Recommended Additional Readings (This is a tentative list.)	:	<ol style="list-style-type: none"> 1. Dunn, R. Everything you know about calories is wrong. <i>Sci Am</i> 2013 Sep;309(3):56-9 2. Freedman, D. H. Are engineered foods evil? <i>Sci Am</i> 2013 Sep;309(3):80-5 3. Ravillious, K. Rain makers: How high-flying bacteria could control the clouds. <i>New Sci</i> 2016 Apr; 3069 4. Wolf, L. K. Caffeine Jitters. <i>Chem Eng News</i> 2013 Feb; 91(5):9-12 5. Barras, C. You are junk: Why it's not your genes that make you human. <i>New Sci</i> 2016 Jul; 3084 6. Featherstone, S. The swallows of Fukushima. <i>Sci Am</i> 2015 Feb; 312(2):74-81 7. Geddes, L. What's the beef? <i>New Sci</i> 2015 Jan; 3005 8. Stone, R. Public Enemy Number One. <i>Science</i> 2013 Apr; 340(6131): 422-5 9. Pontzer, H. The exercise paradox. <i>Sci Am</i> 2017 Feb;316(2):26-31 10. Mlot, C. Are Isle Royale's wolves chasing extinction? <i>Science</i> 2013 May 24; 340(6135):919-21. 11. Ceurstemont, S. Resurrecting nature: Extinct is not forever. <i>New Sci</i> 2017 Feb; 3114 12. Geddes, L. How to target tumours by messing with their metabolism. <i>New Sci</i> 2017 Jan; 3108 13. Vernimmen, T. Killer fungi: The health threat that's creeping up on us. <i>New Sci</i> 2016 Aug; 3086 14. Geddes, L. How a simple blood test could spot cancer earlier. <i>New Sci</i> 2016 Mar; 3065 15. Geddes, L. The blame grain. <i>New Sci</i> 2014 Jul; 2977 16. Bilkey, T., Surman, C., Weintraub, K. ADHD grows up. <i>Sci Am Mind</i> 2014 Jan/Feb 17. Harmon, K. How we all will live to be 100. <i>Sci Am</i> 2012 Sep; 307(3): 54-7

	18. Thomson, H. Ark of the immortals: The future-proof plan to freeze out death. <i>New Sci</i> 2016 Jul; 3080 19. Hamzelou, J. Fertility facts: How late can you leave it to have a baby? <i>New Sci</i> 2016 Jul; 3083 20. Wilson, C. Fat vs carbs: What's really worse for your health? <i>New Sci</i> 2016 Jun; 3077 21. Lambert, C. Grow fat, get thin? We put brown fat to the test. <i>New Sci</i> 2015 Apr; 3017 22. Service, R. F. Silken promises. <i>Science</i> 2017 Oct; 358(6361): 292-4
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III. Course Description and Objectives

We will examine a broad range of life science topics including ecology, nutrition, human disease, and biotechnology. The aim of this course is to introduce you to as many different contemporary life science topics as possible by examining one scientific article per class session. This course will be useful for both science and non-science majors who are interested in learning about recent developments in life sciences. No prior knowledge of biology or chemistry is required. This course is **not** a foundation building course and therefore it is **not** suitable for fulfilling the prerequisite of an upper-level biology course. Classes will be discussion-oriented, and everyone is expected to participate actively daily. **This course does not have a laboratory component.**

IV. Grading

Tests	:	30%
Quizzes	:	30%
Participation	:	40%

V. Class Outline

Date	Topic	Assessment
June 27 (Tue)	Orientation Day (no lecture)	None
June 28 (Wed)	Introduction	None
June 29 (Thu)	Everything you know about calories is wrong	Quiz 01
June 30 (Fri)	Are engineered foods evil?	Quiz 02
July 3 (Mon)	Rain makers	Quiz 03
July 4 (Tue)	Caffeine jitters	Quiz 04
July 5 (Wed)	You are junk	Quiz 05
July 6 (Thu)	(No lecture – test only)	Test 1
July 10 (Mon)	The swallows of Fukushima	Quiz 06
July 11 (Tue)	Public enemy number one	Quiz 07
July 12 (Wed)	The exercise paradox	Quiz 08
July 13 (Thu)	Are Isle Royale's wolves chasing extinction?	Quiz 09
July 17 (Mon)	Extinct is not forever	Quiz 10
July 18 (Tue)	Your brain on migraine	Quiz 11
July 19 (Wed)	Killer fungi: The health threat that's creeping up on us	Quiz 12
July 20 (Thu)	(No lecture – test only)	Test 2
July 24 (Mon)	How a simple blood test could spot cancer earlier	Quiz 13
July 25 (Tue)	ADHD grows up	Quiz 14

July 26 (Wed)	How we all will live to be 100	Quiz 15
July 27 (Thu)	Ark of the immortals	Quiz 16
July 31 (Mon)	Fertility facts: How late can you leave it to have a baby?	Quiz 17
Aug 1 (Tue)	Silken promises	Quiz 18
Aug 2 (Wed)	(No lecture – test only)	Test 3
Aug 3 (Thu)	Graduation Day (Available both Online / Offline)	

Revised on 01/04/2023