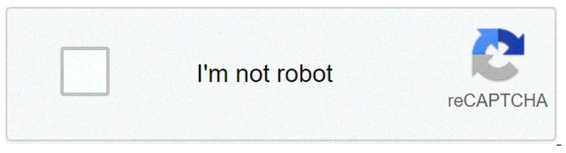

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Introduction to human biology pdf

Area: Faculty of Science and Engineering Credits: 25.0 Contact Hours: 4.5 TUITION PATTERNS: The tuition pattern provides details of the types of classes and their duration. This is to be used as a guide only. Precise information is included in the unit outline. Science Laboratory: 1 x 1.5 Hours Weekly Seminar: 1 x 3 Hours Weekly UNIT REFERENCES, TEXTS, OUTCOMES AND ASSESSMENT DETAILS: The most up-to-date information about unit references, texts and outcomes, will be provided in the unit outline. Syllabus: This unit familiarises students with basic biology terminologies and concepts associated with the human system. It enables students to understand the different types of cells and the journey from cells to complex structures and function. There is a significant laboratory component to provide students with hands-on experience and exposure to a wide range of techniques used in biology. Field of Education: 010913 Human Biology Result Type: Grade/Mark Availability Information has not been provided by the respective School or Area. Prospective students should contact the School or Area listed above for further information. Information in this publication is correct at the time of printing but may be subject to change. In particular, the University reserves the right to change the content and/or method of assessment, to change or alter tuition fees of any unit of study, to withdraw any unit of study or program which it offers, to impose limitations on enrolment in any unit or program, and/ or to vary arrangements for any program. This material does not purport to constitute legal or professional advice. Curtin accepts no responsibility for and makes no representations, whether express or implied, as to the accuracy or reliability in any respect of any material in this publication. Except to the extent mandated otherwise by legislation, Curtin University does not accept responsibility for the consequences of any reliance which may be placed on this material by any person. Curtin will not be liable to you or to any other person for any loss or damage (including direct, consequential or economic loss or damage) however caused and whether by negligence or otherwise which may result directly or indirectly from the use of this publication. International students International students studying in Australia on a student visa can only study full-time and there are also specific entry requirements that must be met. As some information contained in this publication may not be applicable to international students, refer to international.curtin.edu.au for further information. Australian citizens, permanent residents and international students studying outside Australia may have the choice of full-time, part-time and external study, depending on course availability and in-country requirements. 2.1: Case Study: Why Should You Study Human Biology?Human biology is the scientific study of the human species that includes the fascinating story of human evolution and a detailed accounting of our genetics, anatomy, physiology, and ecology. In short, human biology focuses on how we got here, how we function, and the role we play in the natural world. Importantly, this helps us to better understand human health – how to stay healthy and how diseases and injuries can be treated.2.2: Shared Traits of All Living ThingsYou've probably seen this famous statue created by the French sculptor Auguste Rodin. Rodin's skill as a sculptor is evident because the statue looks so lifelike. In fact, the statue is made of rock so its only resemblance to life is how it appears.2.3: Diversity of LifeThe collage above shows a single species in each of the six kingdoms into which all of Earth's living things are commonly classified.2.4: The Human AnimalRelative to all animals, this child and monkey are practically "cousins." From genes to morphology to behavior, they are similar in many ways. That's because both of them are primates, and they share an evolutionary past.2.5: Case Study Conclusion: Inhabitants and Chapter SummaryAs you may recall, Wajiha's strep throat was caused by Streptococcus pyogenes bacteria, the species shown in the photomicrograph above. She took antibiotics to kill the S. pyogenes, but this also killed her "good" bacteria, throwing off the balance of microorganisms living inside of her, which resulted in diarrhea and a yeast infection. Course Code BRPN-101 Course Name Introduction to Human Biology Category Health Professionals Description This course is designed to provide students with a broad, introductory overview of human biology. It is also designed to familiarize students with the fundamental terms, concepts, and principles of human biology and anatomical structures and functions of systems as they relate these principles to the individual, society, and the environment. Students will study such topics as the integumentary, musculo-skeletal, nervous, endocrine, cardiovascular, immune, respiratory, digestive and urinary systems. In addition to reviewing anatomy, students will also be introduced to concepts in physiology within the context of health, wellness, illness and disability of a client across the lifespan and their role in assisting. Students will gain a greater understanding, appreciation and, in some areas, working knowledge of the biology of humans and their individual needs. Notes This certificate will be offered Fall, Winter and Summer semesters. Contact Telephone 416-289-5207 Contact E-mail ce@centennialcollege.ca Associated Programs Register Online Section Cost Semester Start Date End Date Meeting Times Campus 841 $549.00 Summer 2022 2022-05-04 2022-08-05 Times Days 06:00 PM to 09:00 PM W Morningside Campus Legend for DaysM - Monday T - Tuesday W - Wednesday R - Thursday F - Friday S - Saturday U - SundayTBA - To Be Announced Normal 0 false false false EN-US X-NONE X-NONE Course Description: This core curriculum course will concentrate on the quantitative aspects of human biology, including biochemistry, cell biology, molecular physiology and genetics. Emphasis will be placed on molecular mechanisms of cellular processes - such as signal transduction, differential gene expression or self-recognition - that underlie and control pivotal physiological functions of the human organism. Contested topics of modern biology will be introduced and examined using scientific method. Course Learning objectives: Upon successful completion of the course, students should achieve a sound understanding of core concepts of biology and knowledge about the role of various biological macromolecules in the human body, how different types of cells are integrated into multicellular systems, and how organs and organisms develop and function. They will also learn how to apply the scientific method to analysis of various phenomena. Textbooks and On-Line Materials: Human Biology 7th Edition by D.D. Chiras, Jones & Bartlett Learning, 2012 ISBN: 9780763783457; ISBN-13: 9780763783457 Textbook companion website: Normal 0 false false false EN-US X-NONE X-NONE Semester Schedule: The schedule is subject to change according to the need of the class and the instructor, as determined by the instructor. 1. September 01 Introduction 2. September 03 Chapter 1. Course Introductoin; Llife in balance 3. September 08 Chapter 2. The Chemistry of Life 4. September 10 Chapter 3 The Life of the Cell 5. September 15 Chapter 4. Principles of Structure and Function 6. September 17 Chapter 5. Nutrition and Digestion 7. September 22 Chapter 5. Nutrition and Digestion (continued) 8. September 24 Chapter 6. The Circulatory System 9. September 29 Chapter 7. The Blood 10. October 01 Chapter 8. The Vital Exchange: Respiration 11. October 06 Chapter 9. The Urinary System 12. October 8 Midterm Examination I 13. October 11 – October 21 Eid Al Adha holidays 14. October 22 Chapter 10. The Nervous System 15. October 27 Chapter 11. The Senses 16. October 29 Chapter 12. The Skeleton and Muscles 17. November 3 Chapter 13. The Endocrine System 18. November 5 Chapter 14. The Immune System 19. November 10 Chapter 15. Human Infectious Diseases 20. November 12 Chapter 16. Chromosomes, Cell Division, & the Cell Cycle 21. November 17 Chapter 17. Principles of Human Heredity 22. November 19 Chapter 17. Principles of Human Heredity, continued 23. November 24 Midterm Examination II 24. November 26 Chapter 18. How Genes Are Controlled 25. December 1 Chapter 19. Genetic Engineering and Biotechnology 26. December 3 Chapter 20. Cancer 27. December 8 Chapter 20. Cancer (continued) 28. December 10 Chapter 21. Human Reproduction 29. December 15 Chapter 22. Human Development and Aging 30. December 17 Chapter 23. Evolution 31. December 22 Chapter 24. Ecology and the Environment 32. December 24 Midterm Examination III Normal 0 false false false EN-US X-NONE X-NONE Course Description: This core curriculum course will concentrate on the quantitative aspects of human biology, including biochemistry, cell biology, molecular physiology and genetics. Emphasis will be placed on molecular mechanisms of cellular processes - such as signal transduction, differential gene expression or self-recognition - that underlie and control pivotal physiological functions of the human organism. 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Required Courses (42 credits minimum) Basic Sciences General Biology: Ecology, Evolution, and Physiology Introduction to Biological Investigations I, II General Biology: Molecular and Cell Biology and Genetics Human Genetics or Introductory Genetics General Chemistry I or Advanced General Chemistry General Chemistry II or Advanced General Chemistry II General Chemistry Laboratory I, II Elementary Statistics or Statistical Methods in Psychology or Statistics for Sociologists General Physics I Fundamentals of Human Biology Introduction to Human Evolution Human Population Biology Human Anatomy and Physiology I, II Human Population Genetics or Physical Growth and Development or Topics in Human Biology Electives (13 credits minimum) Applied learning You will have the opportunity to work with active faculty researchers in areas including prehistoric human demography, influence of environmental factors on the evolution of the human organism, biological responses to contemporary urban environments such as noise and human development, and the impact of lead on child development. Introduction to the Primates The City and Human Health Human Biomechanics Human Population History Human Osteology Human Population Genetics Physical Growth and Development Introduction to Cultural Medical Anthropology Topics in Human Biology Forensic Anthropology Exercise Physiology The Anthropology of New Reproductive Technologies Demographic Anthropology Nutritional Anthropology Culture, Environment, and Health Human Evolutionary and Environmental Physiology Special Topics in Medical Anthropology Nutrition Human Genetics or Introductory Genetics Cell Biology Parasitic Diseases and Human Welfare World Food Crisis Microbiology Genetics of Human Disease Principles of Ecology and Evolution Ecology Evolution Human Physiology Human Physiology Laboratory Organic Chemistry I Organic Chemistry II Organic Chemistry Laboratory I Organic Chemistry Laboratory II Psychology of Child Development Advanced Biopsychology and Behavioral Neuroscience Health Psychology The Psychology of Human Sexuality Evolutionary Psychology Behavior Genetics Medical Sociology Social Demography Introduction to Public Health Concepts in Epidemiology Promoting Healthy People and Communities Accelerated Undergraduate/Graduate Option You can save time and money by beginning your graduate degree coursework while still enrolled as an undergraduate student. Up to 12 academic credits, billed at the undergraduate rate, will count towards both degrees – so you'll complete your combined program in only 5 years and spend less than you would if you completed each program separately. Combine your Human Biology degree with the MS in Information Science program. This ALA-accredited master's program covers a broad range of interdisciplinary topics related to library science, information processing, information management and data analysis. The Bachelor of Science in Human Biology degree will provide you with a comprehensive understanding of biological anthropology and concepts in public health. You will be prepared to pursue advanced training or professional school in teaching, medical and other health fields. Potential job titles include: Doctor (MD) Doctor of Physical Therapy Physician Assistant Nurse Pharmacist Dentist Agricultural Scientist Health Care Marketer Pre-Health, Early Assurance and Accelerated Programs If you're interested in attending a health professional school, our Pre-Health advisors specialize in helping you to prepare and apply. Learn about opportunities at UAlbany for early assurance to medical school and other joint degree pre-professional programs in areas including medicine, dentistry, optometry, physical therapy, occupational therapy, pharmacy, physician assistant and nursing.