

# **BIOL-121 F01 Human Biology w/Lab**

Dr. Kathy Albert
NORTH CENTRAL KANSAS TECHNICAL COLLEGE

# **COURSE INFORMATION**

An introductory course using exploration of principles and processes common to all living systems as a starting point for the study of human structure and function and the interrelationships between humans and the rest of the Biosphere.

Credits: 4

#### **CLASS INFORMATION**

Term: Spring Year: 2024 Start Date: 01/08/2024 End Date: 05/09/2024

## **INSTRUCTOR**

# Dr. Kathy Albert

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Office Phone: (785) 623-6165
Office Location: HSB-043

Email me with any questions or concerns you have. Please include your full name and the course you are enrolled in.

# **TEXTBOOKS**

Biology Mader 17th Edition ISBN- 13: 9781260710823 with Connect (this is the website you will use for Connect assignments)

Carroll. 2019. The Story of Life: Greatest Discoveries in Biology. 1st edition. ISBN: 9780393631562.

## **COURSE COMPETENCIES**

- 1. Demonstrate an understanding of the nature of science
- 2. Demonstrate an understanding of the levels or organization and emergent properties of life
- 3. Demonstrate an understanding of bioenergetics
- 4. Demonstrate an understanding of the importance of reproduction in maintaining the continuity of life
- 5. Demonstrate an understanding of applying principles of genetics to unity and diversity of life
- 6. Demonstrate an understanding of discussing evolution as the mechanism of change in biology
- 7. Demonstrate an understanding of the principles of ecology
- 8. Demonstrate laboratory skills and techniques

## **GRADING INFORMATION**

 There will be a variety of assessments during this course which will determine your final grade. The various components are as follows:

25 assignments x 5 pts per assignment	125 pts
22 labs x 5 pts per lab	110 pts
6 exams x 100 pts per exam	600 pts
4 assignments x 5 pts per	20 pts
25 quizzes x 10 pts per quiz	250 pts
14 discussions x 10 pts per discussion	140 pts
20 animations x 5 pts per animation	100 pts
	22 labs x 5 pts per lab 6 exams x 100 pts per exam 4 assignments x 5 pts per 25 quizzes x 10 pts per quiz 14 discussions x 10 pts per discussion

## **Reading Assignments**

Throughout the semester, students are expected to be reading a supplemental textbook (The Story of Life: Greatest Discoveries in Biology). Four separate assignments will be given throughout the semester corresponding to particular Chapters in the book that reinforce concepts covered during class. Overall, 40 points total will be allotted for reading assignments.

**Discussions:** Discussions are meant to be interactive between you and your fellow classmates. Since we cannot have classroom conversations these will take the place of them. In order to receive full points on discussions you are required to post an initial response to the questions and then comment on two other classmate's posts. These responses must be well thought out and not a simple one-word answer or a response of good job. The response posts must show you actually read the initial post and have something worthwhile to add.

**Labs:** Labs will be conducted using an online simulation website.

**Smartbook/Assignments**: These activities are to enhance your reading experience and cement the learning objectives we cover each week. Smartbook assignments are not worth points but may be beneficial to complete. Assignments are worth 5 points.

**Quizzes:** Quizzes are 20 questions each worth .5 points. They are multiple choice. When the time is over the quiz will automatically submit to prevent you from going over the time limit.

**Exams:** Exams will concentrate on the lecture materials. They will consist of a variety of type of questions; multiple choice, true/false and matching. They will be online and timed. When the time is over the exam will automatically submit to prevent you from going over the time limit. The last exam will be comprehensive. It will encompass the last unit covered as well as all the previous material.

#### **GRADING SCALE**

After your numerical grade has been calculated, your letter grade will be determined as follows:

A 100% -90%

B 89% - 80%

C 79% - 70%

D 69% - 60%

F 59% and below

## **COMPUTATION OF GRADES**

Assignments/Animations= 20% Labs= 15% Reading Assignments= 10% Discussions=10% Quizzes= 25% Exams= 20%

# Due Dates for labs, quizzes and exams:

All work is due on the last day of the week they are contained within.

# **Late Assignment Policy:**

No late work is accepted.

#### **Extra Credit Policy:**

\*\*\*There is no extra credit available for this course

**Course Objectives:** At the completion of this course, the student should understand the basic concepts of human biology, cell biology and molecular genetics as well as disease control methods, disease prevention/treatment and epidemiology.

Online Course: An online course uses computer-based technologies (i.e. Moodle) to create an online "classroom." Students are instructed in course content through online earning: tutorials, testing exercises, group collaborations, independent assignments, and long-range projects. Each individual course provides a schedule of assignments and deadlines. Students need to have adequate computer skills as they will be communicating with the instructor and classmates online. This course is an online course, and you are responsible for ensuring that you can access all course material on a regular basis either from the NCK Tech campus or from home. Additionally, certain technical abilities will be required, such as installing necessary plug-ins and uploading files. If you have a problem with a personal computer or interrupted network connection, know that you are still responsible for submitting your work on time. Moodle Support: https://ncktc.zendesk.com/hc/en-us

Students are responsible for making sure that their assignments are uploaded correctly into Moodle. No handwritten assignments or pictures of assignments will be accepted.

#### **Time Commitment:**

Overall, you should expect to spend approximately 2-3 hours studying for each hour of lecture time and 1-2 hours of lab time. If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that they can help you find a solution.

# **NCK TECH MISSION STATEMENT**

North Central Kansas Technical College delivers applied, innovative and personalized education to empower learners, enrich lives, develop skilled professionals and strengthen economic systems.

#### Vision Statement

North Central Kansas Technical College is dedicated to being a leader in workforce development by maximizing value forstudents, employers and communities through educational excellence.

Core Values
Achieving EXCELLENCE with INTEGRITY through
DEDICATION
INNOVATION
COLLABORATION
COMMUNICATION

# NCK TECH NON-DISCRIMINATION POLICY

NCK Tech is committed to nondiscrimination on the basis of race, color, gender, ethnic or national origin, sex, sexual orientation, gender identity, marital status, religion, age, ancestry, disability, military status, or veteran status in admission or access to, or treatment or employment in, its programs and activities. Further, it is the policy of the college to prohibit harassment (including sexual harassment and sexual violence) of students and employees. Any person having inquiriesconcerning the college's compliance with the regulations implementing Title VI, Title VII, Title IX, Section 504, and the Americans with Disabilities Act Amendments Act is directed to the VP of Student and Instructional Services (Section 504/ADA Compliance Officer and Title VI, Title VII, & Title IX Compliance Officer) at (785)738-9055, cisbell@ncktc.edu, or PO Box 507, 3033 US Hwy 24, Beloit, KS 67420.

#### **OVERVIEW FOR STUDENTS WITH DISABILITIES**

NCK Tech is dedicated to providing equal access and opportunity to all campus programs and services for students with disabilities. We are committed to providing reasonable accommodations in accordance with applicable state and federal laws including, but not limited to, Section 504 and 508 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. We strive to create a safe, respectful and inclusive environment and promote awareness, knowledge and self- advocacy.

NCK Tech acknowledges that traditional methods, programs and services are not always appropriate or sufficient to accommodate the limitations experienced by some qualified persons with disabilities. When a student's disability prevents him/her from fulfilling a course requirement through conventional procedures, consideration will be given to alternatives, **keeping in mind that academic standards must be maintained**.

Services are provided through Student Accessibility Services (SAS) staff located in the Student Success Center, on the Beloit Campus, and in Student Services, on the Hays Campus.

• Director of Learning Services, may be reached at 1-785-738-9020; or by mail at NCK Technical College, 3033 US Hwy 24, Beloit, KS 67420.

## Student Responsibilities

Students requesting support services will need to register ("self-disclose" and complete Student Accessibility Services Intake and Consent Form), provide appropriate documentation (if available) including how the disability affects academic performance and suggested accommodations, and communicate with the Director of Learning Services as part of the interactive process to create an *Educational Accommodation Plan* that will notify Instructors of approved accommodations, services and/or auxiliary aids.

Students are encouraged to make timely and appropriate disclosures and requests, at least two weeks in advance of a course, program, or activity for which an accommodation is requested (or as soon as realistically possible) to allow adequate time for accommodation services to be set in place.

## Accommodations, Academic Support Services, or Auxiliary Aids

Reasonable accommodations including academic support services and auxiliary aids are provided to allow students with disabilities anequal opportunity to participate in and benefit from our educational programs. Accommodations will be provided on a case-by-case basis determined by student request, documentation, intake interview, Educational Accommodation Plan team, and assessment of individual needs and course requirements.

#### Reasonable testing accommodations may include, but are not limited to:

- Extended testing time
- Reduced distraction testing environment
- Test reader and/or scribe
- Use of calculator

# Academic support services/auxiliary aids may include, but are not limited to:

- Note-taking assistance (second set of notes, power point slides, or other visual aids provided)
- Sign Language Interpreter
- Preferential seating in the classroom
- Large print exams, handouts, signs, etc.
- Telecommunications devices
- Use of Assistive Technology

Accommodations may not fundamentally alter the nature of the program or activity, lower academic standards, present undue financialor administrative burden on the college, or post a threat to others or public safety.

Additionally, some accommodations and services cannot be provided, such as personal devices or assistance with personal services.

Auxiliary aids may be available through a variety of sources available to individual students. The student may make a request in obtaining specialized support services from other resources such as Vocational Rehabilitation Services (VR), Recordings for the Blind, Kansas Talking Book Service, etc. For example, Vocational Rehabilitation may fund such items as transportation to the institution, tuition, textbooks, hearing aids, and other individually prescribed medical devices.

If at any time throughout the academic year, a student feels that the agreed upon accommodations are not being followed or that alternate accommodations need to be provided, the student should notify Student Accessibility Services (SAS) staff. NCK Tech is committed to student success; however, we do not require students to use accommodations. The decision of when to utilize approvedaccommodations or services is up to the student. Integration, self-advocacy and individual responsibility are promoted and expected.

#### Grievance Procedure

Any student who believes he or she has been subjected to discrimination on the basis of disability or has been denied access or accommodations, shall have the right to invoke the Grievance Procedure. Students are encouraged to first discuss their concerns with SAS. An attempt will be made to resolve the issue(s) causing concern by assisting the student in discussions with the person(s) involved. Most situations are positively resolved through this process. If the student does not feel the concern or complaint has been appropriately resolved, he or she should contact the Vice President of Student and Instructional Services at 1-800-658-4655 or PO Box 507, 3033 US Hwy 24, Beloit, KS 67420, where grievance procedures are filedfor all students, including students with disabilities.

If the complaint is not resolved at the College level, a student may choose to file a complaint with the Office for Civil Rights at 1-816- 268-0550 or U.S. Department of Education, One Petticoat Lane, 1010 Walnut Street, Suite 320, Kansas City, MO 64106.

# **Confidentiality**

All information regarding a student's disability is confidential. All documentation will remain separate from academic records and will notbe released to an individual or source external to NCK Tech without the student's written consent. In order to provide effective services, it may be necessary to communicate limited information on a need-to-know basis regarding disability-related needs to NCK Tech facultyand/or staff.

## **Policy Regarding Academic Dishonesty:**

Academic dishonesty of any kind will not be tolerated while attending North Central Kansas Technical College. The examples of academic dishonesty are plagiarism, cheating, falsification or forgery of any assignments or examinations. Any student who participates in any form of academic dishonesty must accept the consequences of their actions. These consequences may include but are not limited to the following: (a) verbal or written warning, (b) lowering of grade for assignment/activity, (c) failure of class assignment or exam.

# **RIGHT TO MODIFY THE SYLLABUS**

The instructor reserves the right to modify the syllabus during the semester. Students will be given advanced notice if achange would occur.

**Human Biology Tentative Schedule, Spring 2024** 

	Ch. Readings	Assignments & Exams – Due Dates
Jan 08	Ch. 1 Exploring Life & Science	Assignments Ch. 1 & 2
	Ch. 2 Chemistry of Life	Discussion
		Quizzes
		Lab
Jan 15	Ch. 3 Cell Structure & Function	Assignments Ch. 3 & 4
Jan 10	Ch. 4 Tissues, Organ Systems &	Discussion
	Homeostasis	Quizzes
	Tiomcostasis	Lab
Jan 22	Ch. 5 Cardiovascular System: Heart &	Assignments Ch. 5
Jan 22	Blood Vessels	Discussion
	blood vessels	Quiz
		Lab
Jan 00	Ch. C. Cardiavas avian Cyatana Pland	
Jan 29	Ch. 6 Cardiovascular System: Blood	Assignment Ch. 6
		Discussion
		Quiz
		Lab
		Exam 1 (Ch. 1-5)
Feb 05	Ch. 7 Lymphatic & Immune Systems	Assignments Ch. 7 & 8
	Ch. 8 Biology of Infectious Diseases	Discussion
		Quizzes
		Lab
Feb 12	Ch. 9 Digestive System & Nutrition	Assignment Ch. 9
	,	Animation
		Quiz
		Lab
		Reading Assignment I
Feb 19	Ch. 10 Respiratory System	Assignments Ch. 10 & 11
	Ch. 11 Urinary System	Animation
	July System	Discussion
		Quizzes
		Labs
		Exam 2 (Ch. 6-9)
Feb 26	Ch. 12 Skeletal System	Assignment Ch. 12
1 60 20	On. 12 Okeletai Oystelli	Assignment on: 12 Animation
		Discussion
		Quiz
Man 0.4	Ob. 40 Museulen Overtere	Lab
Mar 04	Ch. 13 Muscular System	Assignment Ch. 13
		Discussion
		Quiz
		Lab
		Reading Assignment II
Mar 11	SPRING BREAK	
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Mar 18	Ch. 14 Nervous System	Assignments Ch. 14 & 15
	Ch. 15 Senses	Animations
		Discussion
		Quizzes
		Labs
		Exam 3 (Ch. 10-13)
Mar 25	Ch. 16 Endocrine System	Assignments Ch. 16 & 17
	Ch. 17 Reproductive System	Animations
		Discussion
		Quizzes
		Labs
Apr 01	Ch. 18 Development & Aging	Assignments Ch. 18 & 19
	Ch. 19 Cell Division	Animations
		Discussion
		Quizzes
		Labs
		Reading Assignment III
Apr 08	Ch. 20 Cancer	Assignments Ch. 20 & 21
	Ch. 21 Genetic Inheritance	Animations
		Discussion
		Quizzes
		Labs
		Exam 4 (Ch. 14-18)
Apr 15	Ch. 22 DNA Biology & Technology	Assignments Ch. 22 & 23
	Ch. 23 Human Evolution	Animations
		Discussion
		Quizzes
		Labs
		Reading Assignment IV
Apr 22	Ch. 24 Ecology & the Nature of	Assignments Ch. 24 & 25
	Ecosystems	Animations
	Ch. 25 Human Interactions with the	Discussion
	Biosphere	Quizzes
		Labs
A 00	T/ (T	Exam 5 (Ch. 19-22)
Apr 29	Final Exam	Exam 6 (Ch. 23-25)
		Comprehensive