

DUAL CREDIT BIOLOGY SYLLABUS
KISHWAUKEE COLLEGE/SYCAMORE HIGH SCHOOL
2019-2020 School Year

This syllabus is intended to provide a guide to class expectations and schedules. If necessary, the syllabus may be changed to accommodate the needs of the class. It is the responsibility of the student to be aware of and understand the requirements listed in this syllabus.

COURSE INFORMATION

Course Title: General Biology (3 semester credit hours)
Course Number: BIO 103
Time & Classroom: Monday – Friday, 11:20 -12:05, Rm G208, Sycamore High School
Start Date: August 12, 2019
End Date: May 22, 2020

Instructor: Scott Horlock, M.S.
Office Location: G208, Sycamore High School
Office Hours: Mon. - Fri. zero hour, 3rd hour, before or after school by appointment.
Office Phone: 815-899-8160
E-mail Address: shorlock@syc427.org
Faculty Web Site: <https://classroom.google.com>
class code: zbg3jt

COURSE DESCRIPTION Catalog Year: 2019-2020

Prerequisite: Appropriate placement test scores, or (ENG 089 or ENG 097 and ENG 098) AND (MAT 066 or MAT 068 or MAT 096) with grades of "C" or higher.

An introductory course of study of biological science. This course includes an investigation of the basic principles of the study of life including: molecular biology, cell structure and function, genetics, evolution, and ecology. Not recommended for students intending to major in biology.

If for any reason a student is withdrawn or withdraws from the lecture section of a course during the semester, the student will be automatically withdrawn from the co-enrolled laboratory section, no matter what the student's grade may be in the laboratory section up to that point. Students will not be allowed to add back the laboratory section of the course without the lecture section.

REQUIRED TEXTBOOK (The textbook can be purchased or rented at the KC bookstore or online)

Campbell et. al. Biology: Concepts and Connections, (8th edition, Pearson Benjamin Cummings publishers)
ISBN 10: 0-321-88532-5; ISBN 13: 978-0-321-88532-6 (Student Edition)

OR

Campbell Biology: Concepts and Connections, (9th edition, Pearson Benjamin Cummings publishers)
ISBN 10: 9-780134-296012; ISBN 13: 978-0-134-29601-2

Institutional Student Learning Outcomes (ISLO)

Program Student Learning Outcomes (PSLO):

ISLO: Critical Competence

PSLO: Analytic, Knowledge/Skills, Quantitative

1. Solve Hardy-Weinberg problems and apply results to evolution.
2. Understand different types of trait inheritance through genetic problem solving.
3. Describe the shared common characteristics among all living organisms.
4. Identify the inorganic and organic molecules important in biological systems.
5. Describe the cellular function and structure of asexual and sexual reproduction.
6. Describe the cellular processes that occur during plant and animal fertilization and embryo development.
7. Explain how DNA replicates and controls the process of protein synthesis.
8. Describe the scientific method and apply it to an actual every day example.
9. Compare and contrast prokaryotic and eukaryotic cell structure and function.
10. Compare and contrast plant and animal cell structure and function.
11. Explain the process of respiration and photosynthesis.

ISLO: Creative Competence

PSLO: Adaptation, Innovation, Synthesis,

12. Identify the pros and cons of genetic engineering and stem cell research.
13. Identify the major impact humans have on the world's ecosystems today.
14. Explain how natural selection results in species adaptation.
15. Explain the ecological relationships among living organisms and the environment.

Grade Breakdown & Final Grade Determination: (point allocation may be modified as needed)

Quizzes:	12	= 330 points
Exams:	6	= 720 points
Other:	projects, problem sets	= 300 points
Final Exams:	2 @ 150 points each	= <u>300 points</u>
		1650 points

The grading scale is as follows: 90 - 100% \geq 1485 pts = A
80 - 89% = 1,320 pts - 1,484 pts = B
70 - 79% = 1,155 pts - 1,319 pts = C
60 - 69% = 990 pts - 1,154 pts = D
 \leq 989.99 pts = F

1. Grades are not rounded.
2. Extra credit is not available.
3. *Late assignments will NOT be accepted.* Requests for exceptions to this policy need to be made *in advance* of an assignment due date. This includes assignments that are late due to sporting events and field trips!
4. Grade reports will not be mailed. Please check myKC_Kishwaukee College Self-Service Student Planning_Academics_Grades. Please check KishSOS, My Student Info, under Academic Profile, Grades for your final class grade report.

Course Exit Requirements:

To qualify towards a degree/certificate overall grade point average of 2.000 is required in all required and elective course work applicable to the specific degree/certificate.

ABSENCE POLICY/MAKE-UP POLICY

- It is the responsibility of the student to meet with the teacher at an appropriate time (before or after school is recommended) to discuss work that needs to be made up due to an absence.
- A student will be given one day to make up missed assignments for each day of an *excused* absence.
- For a prearranged absence (field trips, in-school functions, vacations, college visits, AP exams, standardized testing, etc.) it is the student's responsibility to contact the teacher prior to the absence to determine what the student will be missing in class. All homework and other assignments must be completed in advance, unless otherwise arranged with the teacher. Failure to complete assignments in advance may result in loss of all credit for that work.
- Labs that are missed due to an excused absence must be made up within a week of returning to school.

STUDENT MATERIALS / TECHNOLOGY

1. Textbook listed above
2. Notebook and writing utensils
3. Graph paper
4. Calculator: a basic scientific calculator is all that is necessary; students will be required to use their own calculators on all tests and quizzes. Calculators on phones are not acceptable during tests and quizzes.
5. Access to the class website (listed above), parent portal, and KishSOS (optional).
6. Flash drive (optional)
7. Colored pencils/markers (optional)

STUDENT EXPECTATIONS

1. Show respect for and be considerate of your classmates, yourself and your instructors.
2. Cell phone use is strongly discouraged.
3. Any use of an electronic device while a test or quiz is being given will result in a score of zero and there will not be an opportunity for a re-take.
4. Come to class with a positive attitude and always give your best effort.
5. Come to class on time, be in your seat ready to go when the bell rings.
6. Be prepared, come to class with reading assignments completed and the appropriate materials and assignments.
7. Follow directions.
8. Use class/lab time appropriately.
9. Follow laboratory safety rules during lab time.
10. Clean up after yourself.
11. If you do not understand something, please ask! Feel free to stop by my classroom or schedule an appointment.
12. Follow school rules as printed in the student handbook.
13. Unacceptable classroom learning behavior can result in a "0" for the assignment, "F" for the course or administrative withdrawal from the course.

COURSE OUTLINE (Tentative schedule and syllabus may be modified as needed)

DATES	TOPIC	CHAPTERS
08/14 - 08/23	Biology: Exploring Life	1
08/24 - 08/30	The Chemical Basis of Life	2
08/31 - 09/11	The Molecules of Cells	3
09/12 - 09/13	Unit I exam	
09/14 - 09/27	A Tour of the Cell	4, 6.1-6.4, 6.6, 6.12, 7.2, 7.5, 7.9, 7.12
09/28 - 10/16	The Working Cell	5
10/17 - 10/18	Unit II exam	
10/19 - 11/08	The Cellular Basis of Reproduction and Inheritance	8, 11.16 - 11.18, 27.13
11/09 - 11/22	Animal Reproduction and Embryonic Development	27
11/25 - 11/26	Parent/Teacher Conferences	
11/27 - 12/01	Thanksgiving Break	
12/01 - 12/11	Plant Reproduction and Embryonic Development	31.1 – 31.4, 31.9 – 31.15
12/12 - 12/13	Unit III exam	
12/19	Semester I Final exam: comprehensive over 1st semester	
01/06 - 01/15	Patterns of Inheritance	9
01/16 - 01/24	Molecular Biology of the Gene	10
01/25 - 02/07	How Genes are Controlled	11
02/08 - 02/19	DNA Technology and Genomics	12, 11.12 – 11.14
02/20 - 02/21	Unit IV exam	
02/22 - 02/28	How Populations Evolve	13
02/29 - 03/06	Origin of Species	14
03/07 - 03/17	Evolutionary History	15
03/18 - 03/19	Unit V exam	
03/21 - 03/29	Spring Break	
03/30 - 04/10	Biomes, Population Ecology	34, 36
04/11 - 04/24	Communities and Ecosystems	37
04/25 - 05/06	Conservation Biology	38
05/07 - 05/08	Unit VI exam	
05/09 - 05/15	Anatomy and Physiology	
05/21	Semester II Final Exam: comprehensive over semester II	

CLASS WITHDRAWAL

A “W” cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at “My Class Schedule” on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee College catalog.

INCOMPLETE GRADE

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an “Incomplete” (I) grade may be given. Taking an Incomplete is possible only at the instructor's discretion. To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time. If the conditions of the contract are not met, an “I” grade may revert to an “F”.

ACADEMIC DISHONESTY

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

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