



Course Outline

COLLEGE PREPARATION PROGRAM

BIOL 025F
Biology 25
Fall, 2012

6 CREDITS
6 HOURS PER WEEK

Maureen Clarke, Instructor

Date

Reviewed and approved by:

Margo Vermillion, Chair

Date

Guy Harmer, Dean

Date

Instructor: Maureen Clarke

Office Hours: Monday 2:00 – 2:50
Tuesday 2:00 – 2:50

Office Phone: 697 – 3767
Home Phone: 697 – 3923

E-mail: maureen.clarke@keyano.ca
mauclarke@yahoo.com

Course Hours: Monday 11:30 – 12:20
Tuesday 11:30 – 12:20
Wednesday 11:30 – 12:20
Thursday 11:30 – 12:20
Friday 10:30 – 11:20 11:30 – 12:20

Location: Room 114

Hours of Instruction: 6 50-minute classes per week.

Credits: 6

Length of Course: 16 weeks

Co-requisite: English 010 or 013 or permission of Program Chair

Text: Biology; Miller & Levine; Prentice Hall
New Jersey
ISBN 0-13-166255-4

Important Dates for Academic Schedule:

- Sept. 3 College closed – Labor Day
- Sept. 4 Orientation Day
- Sept. 5 First day of class
- Sept. 11 Last day to add classes
- Sept. 11 Fall semester fees due
- Sept. 18 Last day to drop course(s) for academics
- Oct. 8 College closed – Thanksgiving
- Oct. 12 Last day to withdraw from course(s) with 50% refund of tuition fees
- Oct. 26 Last day to withdraw from course(s) without academic penalty
- Nov. 12 College closed – Remembrance Day
- Dec., 13 Last day of class
- Dec. 1-18 Final Exams

Course Description:

Topics studied include: cells, protein synthesis, DNA, genetics, principles of classification and ecology

Course Outcomes:

At the completion of the course, students will be able to:

- Understand that the scientific method is used to solve problems
- Understand that all living organisms share certain characteristics
- Understand that biologists use many tools and techniques to study life
- Know that water is necessary for life to exist
- Understand that mass and volume define matter
- Understand the importance of DNA and its relationship with RNA and how heredity affects life
- Understand that the genetic code is universal in nature
- Understand that living organisms are composed of cells which are organized at varying levels of complexity and must divide in order for organism to grow
- Understand that genes are factors that control heredity.
- Understand that evolution is used to explain both the diversity and unity of life
- Understand that in natural selection, only the organisms whose characteristics are well-suited for their environment survive and reproduce
- Appreciate the relationships between humans and the natural world
- Foster an enjoyment of biology

Biology 025 consists of the following material:

UNIT 1	THE NATURE OF LIFE	Sept. 5 -- 11
	Chapter 01 The Science of Biology	pp. 2 - 33
	Chapter 02 The Chemistry of Life	pp. 34 – 61
UNIT 2	Ecology	Sept. 12 - 24
	Chapter 3 The Biosphere	pp. 62 - 85
	Chapter 4 Ecosystems and Communities	pp. 86 - 117
	Chapter 5 Populations	pp. 118 – 137
	Chapter 6 Humans in the Biosphere	pp. 138 - 167
UNIT 3	Cells	Sept. 25 – Oct. 1
	Chapter 7 Cell Structure and Function	pp. 168 – 199
	Chapter 8 Photosynthesis	pp. 200 – 219
	Chapter 10 Cell Growth and Division	pp. 240 – 259

MIDTERM 1

UNIT 4 GENETICS

Oct. 2 -- 16

Chapter 11	Introduction to Genetics	pp. 262 - 285
Chapter 12	DNA and RNA	pp. 286 - 317
Chapter 13	Genetic Engineering	pp. 318 - 339
Chapter 14	The Human Genome	pp. 340 - 365

MIDTERM 2

UNIT 5 EVOLUTION

Oct. 17 – 31

Chapter 15	Darwin's Theory of Evolution	pp. 368 – 391
Chapter 16	Evolution of Populations	pp. 392 – 415
Chapter 17	The History of Life	pp. 416 – 445
Chapter 18	Classification	pp. 446 – 467

MIDTERM 3

UNIT 6 MICROORGANISMS and FUNGI

Nov. 1 - 16

Chapter 19	Bacteria and Viruses	pp. 470 - 495
Chapter 29	Protists	pp. 496 - 525
Chapter 29	Fungi	pp. 526 - 549

MIDTERM 4

UNIT 7 PLANTS

Nov. 19 -- 26

Chapter 30	Plant Diversity	pp. 550 - 577
Chapter 31	Roots, Stems and Leaves	pp. 578 - 607
Chapter 32	Reproduction of Seed Plants	pp. 608 – 629

MIDTERM 5

UNIT 8 INVERTEBRATE ANIMALS

Nov. 27 – Dec. 3

Chapter 26	Sponges, Cnidarians	pp. 656 - 681
Chapter 27	Worms and Mollusks	pp. 682 - 713
Chapter 28	Arthropods and Echinoderms	pp. 714 - 733
Chapter 29	Comparing Invertebrates	pp. 734 – 765

MIDTERM 6

UNIT 9 VERTEBRATE ANIMALS Dec. 4 - 7

Chapter 30	Nonvertebrate Chordates, Fishes and Amphibians	pp. 766 - 795
Chapter 31	Reptiles and Birds	pp. 796 - 819
Chapter 32	Mammals	pp. 820 - 847
Chapter 33	Comparing Chordates	pp. 848 - 869
Chapter 34	Animal Behavior	pp. 870 - 887

MIDTERM 7

UNIT 9 Chordates Dec. 10 - 12

Chapter 47	The Biosphere	pp. 1006 – 1031
Chapter 48	Populations and Communities	pp. 1032 – 1047
Chapter 49	People and the Biosphere	pp. 1048 – 1075

MIDTERM 8

REVIEW December 13

Final Exam TBA

Evaluation:	Attendance	5%
	Assignments	35%
	Midterms (5)	40%
	Final Exam	20%
	Total	100%

Grade Point

Descriptor	Alpha Grade	4.0 Scale	Percentage
Excellent	A+	4.0	91 – 100
	A	4.0	85 - 90
	A-	3.7	80 – 84
Good	B+	3.3	76 –79
	B	3.0	73 – 75
	B-	2.7	70 – 72
Satisfactory	C+	2.3	67 –69
	C	2.0	64 – 66
PROGRESSION			
PASS	C-	1.7	60 – 63
Poor	D+	1.3	57 – 59
MINIMUM PASS	D	1.0	50 – 56
Fail		0.0	0 – 49

Overall Expectations:

Please turn off cell phones, MP3 players and any other electronic devices during class time.

Assignments: Assignments must be dated and submitted to the instructor no later than 4:00 pm on the day on which the assignment is due. Late assignments will be accepted but a penalty of 2% of the mark to a maximum of 10% per day will be deducted as a penalty.. Exemptions for assignments may be granted in exceptional circumstances beyond the control of the student. A 5% bonus mark will be given to all assignments that are turned in on time.

Punctuality: Punctuality is important. Students are expected to be ready to begin work when the class is scheduled to begin. Therefore, students are encouraged to arrive at class a minute or two early so that they may organize their working materials by starting time. Late arrival is detrimental to the student and inconsiderate of the instructor and other students. Arrival in good time is associated with success and is considerate of the instructor and other students.

Attendance: Students are expected to attend all classes. Should a student miss a class for any reason it is his/her responsibility to cover the work missed and be ready for the next class.

If you want to be assured of success in this course the following three things will most often grant that to you.

1. Attend every day and get involved in the class. When you can't attend, cover the work done anyway.
2. Ask a question when you do not understand the work and keep asking until you get an explanation you can understand.
3. Do all of the daily work given or give it your very best effort and get help with the parts you are unable to complete.

Student Rights and Responsibilities

Students should be aware of their rights and responsibilities as laid out in the Keyano College Credit Calendar 2012-2013. In order to "refrain from unduly disturbing, disrupting or otherwise interfering with studies..." (KCCC, 2012-2013, p. 38) students should turn cell phones and pagers off when they come to class, and refrain from bringing children or other visitors to class.



Learner Assistance Program (LAP)

If you have been diagnosed with a Learning Disability in the past, or you feel that you would benefit from some assistance from a Disabilities Counsellor, please call our office 780-792-5608 to book an appointment. Services and accommodations are intended to assist you in your course, while maintaining the academic standards of Keyano College. We can be of assistance to you in disclosing your disability to your instructor, receiving accommodations, and your overall a success at Keyano College.

HAVE A GREAT SEMESTER!!