DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE BI0130 A2 F14
BI0130 - Biology Grade 12 Equivalent- Fall 2014

INSTRUCTOR: Sheryl Heikel **PHONE:** Office: 780–539–2059
OFFICE: C417 **E-MAIL:** sheikel@gprc.ab.ca

OFFICE HOURS: Mondays 11:00 am – 12:00 noon
Fridays 11:30 am – 12:30 pm
Or by appointment

PREREQUISITE(S)/COREQUISITE:

BI0120 (Biology 20); EN0120 (English 20-1 or 20-2) or EN0130 placement; MA0110 (Math 10C) or MA0123 (Math 20-3) or MA0120 placement. See also Academic Upgrading Science Requirements.

REQUIRED TEXT/RESOURCE MATERIALS:

Inquiry into Biology - McGraw-Hill Ryerson

NOTE: There are approximately 300 pages of recommended printing for this course. You must print the lab sheet pages. It is optional, but some students find it beneficial to print the Lecture PowerPoint presentations.

CALENDAR DESCRIPTION:

BI 0130 - Biology Grade 12 Equivalent 5 (5-0-1.5) HS
The concepts in this course include nervous and endocrine systems; cell division; genetics and molecular biology; populations and community dynamics.

CREDIT/CONTACT HOURS: 5 credits; 6.5 contact hours per week

DELIVERY MODE(S): Classroom instruction and lab. Use of Moodle required.

TRANSFERABILITY:

This course is listed in the Alberta Transwer Guide. Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

Important Dates: **Last day to** Withdraw with refund **September 18**
$$$ Late fee added for unpaid fees after **September 25**
Last day to Withdraw with permission **October 29**
$$$ October 29 Student withdrawn from class (WF) if fees not paid in full.
Last Day of Class: December 8, 2014 Final Exam is scheduled after this date.

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	*4-point Equivalent*	*Percentage Guidelines*	*Designation*
A^{+}	*4.0*	*90 – 100*	*EXCELLENT*
A	*4.0*	*85 – 89*	
A^{-}	*3.7*	*80 – 84*	*FIRST CLASS STANDING*
B^{+}	*3.3*	*77 – 79*	
B	*3.0*	*73 – 76*	*GOOD*
B^{-}	*2.7*	*70 – 72*	
C^{+}	*2.3*	*67 – 69*	*SATISFACTORY*
C	*2.0*	*63 – 66*	
C^{-}	*1.7*	*60 – 62*	
D^{+}	*1.3*	*55 – 59*	*MINIMAL PASS*
D	*1.0*	*50 – 54*	
F	*0.0*	*0 – 49*	*FAIL*
WF	*0.0*	*0*	*FAIL, withdrawal after the deadline*

EXAMINATIONS:

All tests and exams MUST be written at the scheduled times unless **PRIOR** arrangements have been made with the instructor. If you miss an exam you must contact me (by email or voice message) **on the day of the exam**. A missed exam will result in a score of ZERO on that exam unless permission is awarded to write an alternate exam at another date. Only in very specific cases may students be given an opportunity to make up a missed exam. Doctor, lawyer or police documentation may be required. The final exam is scheduled by the registrars' office during GPRC Exam weeks.

STUDENT RESPONSIBILITIES:

Attendance: Regular attendance is expected of all students and is crucial to good performance in the course. Class interruption due to lateness will **NOT** be permitted. You may be debarred from the final exam if your absences exceed 15% of class days (10 lecture classes).

AUD Student Classroom Deportment Guidelines The Academic Upgrading Department is an adult education environment. Students are expected to show respect for each other as well as faculty and staff. They are expected to participate fully in achieving their educational goals.

Certain activities are disruptive and not conducive to an atmosphere of learning. In addition to the *Student Rights and Responsibilities* as set out in the College calendar, the following guidelines will maintain an effective learning environment for everyone. We ask the cooperation of all students in the following areas of classroom deportment.

1. Students are expected to turn off cell phones during class time or in labs.
   No unspecified electronic devices will be allowed in exams.
2. Refrain from disruptive talking or socializing during class time.
3. Be respectful of others regarding food or beverages in the classroom.
   Clean up your eating area and dispose of garbage.
4. Recycle paper, bottles and cans in the appropriate containers.
5. Students are expected to **arrive on time and to remain for the duration of scheduled class**.
6. Children are not permitted in the classrooms.
7. Students are expected to notify his/her instructor of any extenuating circumstances.

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the College Policy on Student Misconduct: Plagarism and Cheating at
https://www.gprc.ab.ca/files/forms_documents/Student_Misconduct.pdf
**Note: all Academic and Administrative policies are available at
https://www.gprc.ab.ca/about/administration/policies/

COURSE SCHEDULE/TENTATIVE TIMELINE:

Biology 0130 consists of four units

Unit 1:	The Nervous and Endocrine Systems	4 weeks
Unit 2:	Reproduction and Development	2 weeks
Unit 3:	Cell Division, Genetics, and Molecular Biology	5 weeks
Unit 4:	Populations and Community Dynamics	2 weeks

EVALUATION: Course final grade will be based on the following components. Final Grades will be assigned on the Letter Grading System.

Unit 1 Test	10%
Unit 2 Test	5%
Unit 3 Test	10%
Unit 4 Test	5%
Quizzes	5%
Labs	15%
Midterm (covers units 1 + 2)	25 %
Final (covers Units 3 + 4)	25%
TOTAL	100%

LEARNING OUTCOMES: For more detail please see the Student Syllabus on Moodle.

As stated by Alberta Education, upon successful completion of this course the student will be able to

1) explain how the nervous system controls physiological processes
2) explain how the endocrine system contributes to homeostasis.
3) explain how survival of the human species is ensured through reproduction
4) explain how human reproduction is regulated by chemical control systems
5) explain how cell differentiation and development in the human organism are regulated by a combination of genetic, endocrine and environmental factors.
6) describe the processes of mitosis and meiosis
7) explain the basic rules and processes associated with the transmission of genetic characteristics
8) explain classical genetics at the molecular level.
9) describe a community as a composite of populations in which individuals contribute to a gene pool that can change over time
10) explain the interaction of individuals in a population with one another and with members of other populations explain, in quantitative terms, the change in populations over time.

Labs:

- Attendance is compulsory in all labs.
- Missed labs result in a score of zero. **There are NO make-up labs.**
- If you are late and have missed the lab safety discussion, you will be excluded from participating in the lab and will receive a mark of zero. The lab is certified as a biohazard zone and the regulations that apply will be given to you during your first lab
- Late lab reports will result in a penalty of 20% per day. Labs over two days late will not be graded without PRIOR approval.
- Download the lab sheets and complete any Pre-lab assignment before the lab period, data tables are completed during the lab and analysis and questions after the lab.

Lab Schedule Thursdays L1 8:00 – 9:20 am J130
L2 11:00 am – 12:50 pm J130

Biology	**0130**		Winter 2014
Date		**Room**	
Sep 9			No lab
Sep 16		J130	Safety
Sep 23	Lab 1	J130	Nervous System
Sep 30	Lab 2	J130	Fetal Pig
Oct 7		E306	Unit 1 Exam
Oct 14		E306	STI report
Oct 21		E306	Midterm (Units 1 + 2) 8:00 am
Oct 28	Lab 3	J130	Mitosis Part 1
Nov 4	Lab 4	J130	Mitosis Part 2
Nov 11			Remebrance Day Holiday
Nov 18	Lab 5	J130	Unit 3 Quiz / Genetics
Nov 25	Lab 6	J130	Breeding Bunnies
Dec 2	Lab 7	J130	Yeast