



DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – FALL 2015

Biology 0130 A2/B2 Biology Grade 12 Equivalent 5(5-0-1.5) HS

INSTRUCTOR: Rick Scott **PHONE:** 780-539-2953
OFFICE: J121 **EMAIL:** RScott@gprc.ab.ca

OFFICE Monday 11:00 – 12:00 Wednesday 10:00 – 11:00
HOURS: Thursday 10:00 – 11:00 or by appointment

DELIVERY MODES: Lecture and Labs plus use of Moodle and online resources.

CREDIT/CONTACT HOURS: 5(5-0-1.5) Five hours of lecture and 2 hours of lab per week.

Lecture: MF 08:30 – 9:50 TW 08:30- 9:20 in E306 Lab: Tuesday 8:00- 9:50 or 11:00 – 12:50 in J130

PREREQUISITES: 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 by Colbourne et.al. McGraw-Hill Ryerson. ISBN-13 978-0-07-096052-7 (This is also the text for BI0120.) You must also print the lab manual which will be available on Moodle. Please keep in mind the colleges printing policy.

CALENDAR DESCRIPTION: The concepts in this course include nervous and endocrine systems; human reproduction and development; cell division, genetics, and molecular biology; populations and community dynamics.

LEARNING OUTCOMES: Biology 0130 has four main units. The major learning outcomes for each unit for students successfully completing this course are to:

Unit 5 The Nervous and Endocrine Systems (Chapters 11, 12 and 13)

1. explain how the nervous system controls physiological processes
2. explain how the endocrine system contributes to homeostasis..

Unit 6 Reproduction and Development (Chapters 14 and 15)

1. explain how survival of the human species is ensured through reproduction
2. explain how human reproduction is regulated by chemical control systems
3. explain how cell differentiation and development in the human organism are regulated by a combination of genetic, endocrine and environmental factors.

Unit 7 Cell Division, Genetics and Molecular Biology (Chapter 16, 17 and 18)

1. describe the processes of mitosis and meiosis
2. explain the basic rules and processes associated with the transmission of genetic characteristics.
3. explain classical genetics at the molecular level.

Unit 4 Population and Community Dynamics (Chapters 19 and 20)

1. describe a community as a composite of populations in which individuals contribute to a gene pool that can change over time
2. explain the interaction of individuals in a population with one another and with members of other populations
3. explain, in quantitative terms, the change in populations over time.

OBJECTIVES:

The objectives of Biology 0130 are to cover the curriculum of Biology 30 as taught in Alberta High Schools, to foster an appreciation for the science of biology and its applications, and to provide students with a hands on lab experience to acquire practical skills needed to study biology.

COURSE SCHEDULE/TENTATIVE TIMELINE: Sept. 2 – Dec 19, 2013

Week 1	The Nervous System Chapter 11	
Week 2	Sensory Reception Chapter 12	
Week 3	Hormonal Regulation of Homeostasis Chapter 13	
Week 4	Hormonal Regulation of Homeostasis cont.	
Week 5	Reproduction and Development Chapter 14	Unit 5 test Mon Sept. 28
Week 6	Reproduction and Development Chapter 15	
Week 7	Cell Division, Genetics, and Microbiology Chapter 16	Unit 6 test Wed Oct 14
Week 8	Cell Division, Genetics, and Microbiology Chapter 17	Midterm Mon. Oct 19
Week 9	Cell Division, Genetics, and Microbiology Chapter 18	
Week 10	Cell Division, Genetics, and Microbiology cont.	
Week 11	Unit Test (Nov 10) and Fall Break (Nov 11-13)	Unit 7 Test Mon. Nov 9
Week 12	Population and Community Dynamics Chapter 19	
Week 13	Population and Community Dynamics Chapter 20	
Week 14	Population and Community Dynamics Cont.	Unit 8 test Mon. Dec 9

A lab schedule will be handed out in class.

EVALUATIONS:

Unit Tests.....20%
 Lab reports and quizzes20%
 Assignments.....10%
 Midterm.....25%
 Final.....25%

The Midterm covers Units 5 and 6. The final covers Units 7 and 8

The final Exam will be scheduled by the Registrar during Dec 10-19.

Quizzes plus lab report and assignment due dates will be given during Lab time.

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

STUDENT RESPONSIBILITIES:

Refer to the College Policy on Student Rights and Responsibilities at www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES

If you are absent from a test or exam, you **MUST** let the instructor know (by email or voice message) on the day of the missed test that you will not be writing the test or as soon as possible after. Also you may be asked to provide a doctor's certificate that explains your absence for that particular time. Only then will an alternate time be scheduled for you to write a different test or exam.

Quizzes will be written on the day announced in lab. If you miss a quiz you will automatically get a zero as there is no opportunity to make up missed quizzes

If you are late for a lab, you might not be permitted to do the lab as important safety concerns are always addressed at the beginning of each lab period. The lab is certified as a Level 2 biohazard facility and the regulations that apply will be given to you during your first lab. If you miss a lab, you will not have the opportunity for a make-up lab. You automatically receive a grade of 0 for that lab.

Attendance:

If you miss 10 or more classes (including labs) you may be debarred from the final exam.

Tardiness (Lateness): Come on time!**Cell Phone or other Electronic Equipment Use**

Sending or receiving electronic messages during class or lab time will not be tolerated.

Labs and assignments

These are due on the day announced in class, lab or as posted on Moodle. If you submit your assignment or lab late you may be docked 10% per day late. A late assignment or lab will not be accepted once the assignment or lab has been returned to other students.

Tests and Exams

Use of any electronic communication devices during Tests and Exams is not permitted.

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the College Student Misconduct: Academic and Non-Academic Policy at www.gprc.ab.ca/d/STUDENTMISCONDUCT

**Note: all Academic and Administrative policies are available at www.gprc.ab.ca/about/administration/policies/

TRANSFERABILITY: This course is equivalent to the Alberta Learning Biology 30 curriculum, and is listed as such in the Alberta Transfer 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