HIGH SCHOOL BIOLOGY COURSE SYLABUS 2015-2016

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<u>Pledge</u>: I believe in you, I trust you. I will come in to work each and every day

ready to give you 100% and I will always be willing to explain why we are doing something. I will be reasonable and thoughtful, honest and sincere. I will treat you

like young adults that care.

<u>Course Materials</u>: Please bring whatever materials you feel are necessary everyday, certainly a planner, writing utensil and something to use that utensil with (i.e. paper). Please see me for suggestions if needed.

<u>Text</u>: The text will be supplemented throughout this course with various materials,

including, but not limited to, video, other texts, current articles and lecture

material.

Biology, by Miller and Levine

Publisher: Prentice Hall ISBN: 0-13-166255-4

<u>Course Content/Objectives</u>: Course curriculum is designed from the currently proposed Michigan Science Standards (August 2015). The course text will be used to supplement the inclass material throughout the course, corresponding chapters from the text are listed below.

	Major Units	Topics Covered	Text Chapters
1	Genetics	Genetics and inherited traits, DNA, Central Dogma, Cell division, Genetic variation, Recombinant DNA.	1, 11, 12, 13, 14, 10
2	Natural Selection and Comparative Anatomy	Theory of evolution, molecular evidence, natural selection,	15, 16, 17, 18
3	Cellular Mechanics	Energy transfer and growth, cell differentiation/specialization, photosynthesis and cellular respiration	19, 7, 8, 9
4	Human Body Systems	Photosynthesis and cellular respiration, ecosystems, element recombination,	35, 36, 37, 38, 39, 40
5	Ecology	Changes in ecosystems, human impact, populations, and environmental factors.	3, 4, 5, 6

This outline provides an overview, some topics will be covered in more depth than others. The instructor reserves the right, with notice to the students, to add items to this summary. Subtracting of items is less likely and would only occur in the event that a pre-assessment indicates sufficient prior knowledge by a vast majority of the students.

<u>Major Assignments:</u> These assignments will be assigned over the course of the year and correlate to major units (topics). A project based approach will be taken. You will receive a rubric for the grading of these assignments and successful completion of this course will be contingent upon you completing these assignments.

<u>Grading</u>: Course grades are determined by performance on assigned tasks. Tasks will take three forms, outlined below. Grade categories will not be weighted but will occur in approximately equal proportions with a slightly higher emphasis on the Practical category.

Objective, ~1/3: Objective tasks are graded on a simple point system or a Pass/Fail system. The score will reflect overall competence as based on the total points possible (shown as a percentage). Examples of these assignments are vocabulary definition sheets, pre-tests, a simple read-and-answer-questions task or a multiple choice assessment.* No partial credit can be earned if these are not turned in.

Practical, ~1/3: Practical assignments involve the demonstration of knowledge by performing a task and providing some form of proof that you understand the concept. All these assignments are graded with a rubric. Partial credit can be earned by actively participating and demonstrating knowledge through action and/or discussion with the teacher. Examples of these tasks are labs, group discussions, and general activities.*

Engagement, ~1/3: Participation, the most common of these tasks, is scored according the "engagement rubric" provided below. Engagement skills will be highlighted throughout this course. Students should maintain biology notes and participate, vocally and/or attentively, during class. Engagement will be assessed through surveys, one-on-one conferences and daily teacher observations and will be graded frequently. The goal is to give students an accurate sense of how the instructor perceives their engagement in class and with the material.

*It is common that an activity will include multiple types of the above. For instance, a lab activity will usual include a follow up assignment. The lab activity would be graded as a 'practical' while the follow up would be graded as an 'objective' assignment. The example lab activity would appear in PowerSchool as two separate grades, one practical and one objective.

Engagement Rubric

	A+	A	В	C	D	F
	Always	Mostly	Often prepared	Limited	Virtually no	No interaction
	prepared for	prepared for	for class with	interaction	interaction with	with
	class with	class with	materials and	with peers	peers	Peers
	materials and	materials and	prerequisite	_	_	
	prerequisite	prerequisite	knowledge	Preparation, and	Rarely prepared	Never prepared
	knowledge	knowledge		therefore level of	Rarely	
			Group dynamic	participation, are	participates	Never participates
	Group dynamic	Group	and	both inconsistent		
	and	dynamic and	level of		Comments are	Demonstrates a
	level of	level of	discussion are	When prepared,	generally vague or	noticeable lack of
	discussion are	discussion are	occasionally	participates	drawn from	interest in the
	consistently	often better	better	constructively in	outside	material
	better	because of the	because of the	discussions and	of the subject	(ongoing)
r .	because of the	student's	student's	makes relevant	matter	
RT	student's	presence	presence (never	comments based		Group dynamic
EXTRAVERT	presence		worse)	on	Demonstrates a	and
41		Engages		the assigned	noticeable lack of	level of discussio
\mathbb{R}	Creatively	creatively but	Makes relevant	material	interest	are significantly
ζŢ	engages topic	may not	comments based			harmed by the
E	and	acknowledge	on the assigned	Group dynamic	Group dynamic	student's presenc
	acknowledges	the	material	and	and	
	the ideas of	contribution of		level of discussion	level of discussion	Shows limited
	others.	others	Mostly creative	are not affected by	are harmed by the	creativity and
			output tends not	the student's	student's presence	acknowledgment
	Actively	Actively	to acknowledge	presence		
	supports,	supports,	the contribution		Shows limited	
	engages and	engages and	of others	Shows limited	creativity and	
	listens to peers	listens to peers	363	creativity and	acknowledgment	
	(ongoing)	(ongoing)	Makes a sincere	acknowledgment		
	E	C1 :	effort to interact			
	Exudes interest	Shows interest	with peers			
	in subject matter	in subject matter	(ongoing)			
	matter	matter				
	Group dynamic	Group	Group dynamic	Group dynamic	Rarely prepared	No interaction
	and	dynamic and	and	and	never participates	with
	level of	level of	level of	level of discussion		Peers, even non-
	discussion are	discussion are	discussion are	are not affected by	Comments (when	verbal
	consistently	often better	occasionally	the student's	made) are vague	
	better	because of the			,	
		occause of the	better	presence	or	Never prepared
	because of the	student's	because of the		or drawn from	
	student's		because of the student's	Shows limited	or drawn from outside	Never prepared Never participate
		student's presence	because of the student's presence (never	Shows limited creativity and	or drawn from	Never participate
	student's presence	student's presence Creatively	because of the student's	Shows limited	or drawn from outside	Never participate Demonstrates a
	student's presence Creatively	student's presence Creatively engages topic	because of the student's presence (never worse)	Shows limited creativity and acknowledgment	or drawn from outside of the subject matter	Never participate Demonstrates a noticeable lack o
${f T}$	student's presence Creatively engages topic	student's presence Creatively engages topic but has almost	because of the student's presence (never worse)	Shows limited creativity and acknowledgment Is noticeably	or drawn from outside of the subject matter	Never participate Demonstrates a noticeable lack o interest in the
ERT	student's presence Creatively engages topic and	student's presence Creatively engages topic but has almost no interaction	because of the student's presence (never worse) Creatively engages topic as	Shows limited creativity and acknowledgment Is noticeably unprepared at	or drawn from outside of the subject matter Demonstrates a noticeable lack of	Never participate Demonstrates a noticeable lack o interest in the material
VERT	student's presence Creatively engages topic and acknowledges	student's presence Creatively engages topic but has almost	because of the student's presence (never worse) Creatively engages topic as evidence by	Shows limited creativity and acknowledgment Is noticeably	or drawn from outside of the subject matter	Never participate Demonstrates a noticeable lack o interest in the
ROVERT	student's presence Creatively engages topic and acknowledges the ideas of	student's presence Creatively engages topic but has almost no interaction with others.	because of the student's presence (never worse) Creatively engages topic as evidence by teacher/student	Shows limited creativity and acknowledgment Is noticeably unprepared at least once a week	or drawn from outside of the subject matter Demonstrates a noticeable lack of interest	Never participate Demonstrates a noticeable lack o interest in the material (ongoing)
TROVERT	student's presence Creatively engages topic and acknowledges	student's presence Creatively engages topic but has almost no interaction with others. Actively	because of the student's presence (never worse) Creatively engages topic as evidence by	Shows limited creativity and acknowledgment Is noticeably unprepared at least once a week Is noticeably	or drawn from outside of the subject matter Demonstrates a noticeable lack of interest Group dynamic	Never participate Demonstrates a noticeable lack o interest in the material (ongoing) Group dynamic
INTROVERT	student's presence Creatively engages topic and acknowledges the ideas of others.	student's presence Creatively engages topic but has almost no interaction with others. Actively listens	because of the student's presence (never worse) Creatively engages topic as evidence by teacher/student discussions	Shows limited creativity and acknowledgment Is noticeably unprepared at least once a week Is noticeably distracted from	or drawn from outside of the subject matter Demonstrates a noticeable lack of interest Group dynamic and	Never participate Demonstrates a noticeable lack o interest in the material (ongoing) Group dynamic and
INTROVERT	student's presence Creatively engages topic and acknowledges the ideas of others. Actively listens	student's presence Creatively engages topic but has almost no interaction with others. Actively listens to peers and	because of the student's presence (never worse) Creatively engages topic as evidence by teacher/student discussions Listens to peers	Shows limited creativity and acknowledgment Is noticeably unprepared at least once a week Is noticeably distracted from subject material a	or drawn from outside of the subject matter Demonstrates a noticeable lack of interest Group dynamic and level of discussion	Never participates Demonstrates a noticeable lack o interest in the material (ongoing) Group dynamic and level of discussion
INTROVERT	student's presence Creatively engages topic and acknowledges the ideas of others. Actively listens to peers and	student's presence Creatively engages topic but has almost no interaction with others. Actively listens to peers and occasionally	because of the student's presence (never worse) Creatively engages topic as evidence by teacher/student discussions Listens to peers and occasionally	Shows limited creativity and acknowledgment Is noticeably unprepared at least once a week Is noticeably distracted from	or drawn from outside of the subject matter Demonstrates a noticeable lack of interest Group dynamic and level of discussion can be harmed by	Never participate Demonstrates a noticeable lack o interest in the material (ongoing) Group dynamic and level of discussion are significantly
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GTA High School Grading Scale: No credit will be awarded for grades lower than 2.0.

Percentage	Letter Grade	GPA Assignment
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	В	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	.7
0-59	F	0

Policies/Procedures:

Homework: This may include reading, watching a video or streaming lecture, working on a larger project or report. I am careful about assigning homework, so it is important that you are careful about doing it the day it is assigned.

Corrected Work: Work will be graded fairly and with great scrutiny. All work handed in and then graded may be corrected and/or re-done, once returned by instructor, for full credit, with no penalty. (Provided it is on time, see below).

Late Work: Assigned work can be turned in on time for up to 100% credit. Work turned in the same week, but later than the assigned day, as the due date can be turned in for up to 80% credit. All work may be turned in after the week of the due date for up to 50%. *PLEASE NOTE: I am a reasonable and fair individual, please discuss planned lateness with me.*

Absence/Tardiness: Absences and tardies are the responsibility of the individual student and that student should make arrangements to gather missed materials from classmates and/or the teacher website before talking with the instructor about what was missed.

^{**} A syllabus is a contract between a teacher and student, if changes are made to anything pertaining to this document, notice and explanation will be given and should be respectfully demanded by students.