BIO 111-601: GENERAL COLLEGE BIOLOGY I
Spring 2020 Syllabus

By remaining in this course, you agree to the policies and procedures outlined in this syllabus.

CONTACT INFORMATION

Instructor: Dr. Susan Trapp, PhD
Office: Room #2557, Adjunct Faculty Office (Lakewood campus)**
Office Hours: During Lab | (or by appointment on Saturday after lab)
Email: susan.trapp@rrcc.edu
Note: Please activate your RRCC student email. The department specifies that all correspondence between instructors and students should be through the RRCC student email due to new privacy policies (FERPA). NOTE: You can forward your RRCC email or D2L email to your personal email account. Though, I will try to get back to you as quickly as possible, please allow up to 24 hours for a response during the work week, Monday through Friday, and up to 48 hours during the weekend)

SECTION INFORMATION (BIO 111-601)

Start and End Dates = 1/25/2020 – 5/7/2020
Lecture = S 9:00-12:30pm in room #2565
Lab = S 1:00-3:40pm in room #2567
Course webpage = Use *THE ROCK* or go directly to D2L (https://rrcc.desire2learn.com/)

REQUIRED TEXTBOOK/COURSE MATERIALS

Required Lab Manual: BIO 111 General College Biology I Laboratory Manual custom edition for RRCC 2017 (in the bookstore-ISBN: 9781323913901). **This is required.**

Textbook: Campbell Biology by Urry et al. 11th edition ©2017. There are a few options to choose from – the RRCC custom split version (Vol. 1, ISBN: 9781323674949) or full text version (recommended if you plan to take BIO 112 also). The custom Vol. 1 special edition for RRCC is recommended if you **ONLY** plan to take only BIO 111. There are also several other options available for the textbook (i.e., used, digital, renting, etc.). Some type of textbook is required.

Other Materials: Notebook and paper, calculator, pens, no. 2 pencil, colored pencils, access to a computer with reliable internet

Optional: Mastering biology online access kit. An access code comes with new textbooks or can be purchased separately online at the Mastering Biology website (www.masteringbiology.com). This **MAY** be helpful to some students as there are quizzes, activities, study aide, tutorials and visual animations.

COURSE DESCRIPTION:

Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function, and the metabolic processes of respiration, and photosynthesis, as well as cell reproduction and basic concepts of heredity. The course includes laboratory experience. This is a guaranteed transfer (GT) pathways course in the GT-SC1 category. See below for more information on GT-SC1 courses.
Credit hours = 5

COURSE PREREQUISITE

C or higher or equivalent placement scores in CCR092/094 and MAT050.

GRADING

Letter grades will be assigned according to the total percentage of points earned in the course (see scale below). You can calculate your current letter grade at any time by dividing the number of points you have earned by the total number of points possible to date. Points will be associated with elements of both lecture and laboratory as outlined below. **Please remember that your grade is determined by your**

demonstration of mastery of the material and not by your perceived effort in the course. Letter grades are defined as follows:

A = 89.5-100% – distinguished achievement for superior work and understanding
B = 79.5-89.4% – better than acceptable achievement, high level of understanding
C = 69.5-79.4% – acceptable achievement for advancement in the same or related studies
D = 59.5-69.4% – less than acceptable achievement for advancement in related studies
F = <59.4% – failure to achieve or master the learning objectives of the course, unworthy of credit, does not apply toward certificates or degrees.

METHODS OF EVALUATION / ASSESSMENT

Lecture:

3 lecture exams @ 100 points each: **300 points**

1 final comprehensive exam: **150 points**

Language of Science worksheet: **10 points**

2 presentation/research projects @ 25 points each: **50 points**

Lecture Assignments/ Quizzes: **80 points**

Research Project Poster/Presentation (optional): 30 points **extra credit (bonus)**

Total points in lecture: **590 points**

Lab:

2 practicum exams @ 50 points each: **100 points**

10 weekly labs @ 20 points each: **200 points** (*11 labs total/ 1 dropped*)

10 Lab Quizzes @ 5 points each: **50 points** (*11 quizzes total/ 1dropped*)

Metric Review worksheet: **10 points**

2 formal lab reports @ 10 & 15 points, in addition to labs: **25 points (Labs #1 & #8, respectively)**

Total points in lab: **385 points**

Overall course (Gen):

Attendance/ Conduct/ Participation: **25 points**

Total points Lecture + Lab + Gen: **1000 points total**

Lecture Exams (3 x 100 pts + 150 pts final = 450 pts):
There will be a total of four lecture exams – three 100pt 'midterm' exams and one 150pt comprehensive final exam. The exams will be comprised of objective (e.g. multiple choice, T/F, matching, fill-in-the-blank) and subjective (e.g. short answer, essay) questions. Lecture exams consist of material covered in class and specific lecture readings from the text. You will have an opportunity to review your graded exams in class or lab, or other appointment times, but you cannot keep them. ***There are no make-up exams*. If you miss an exam, you will receive a zero unless your absence was due to a university-accepted documented emergency or previously excused absence in which case, I will give you a make-up exam – this will be done at my discretion.** Please note that routine illnesses, plane reservations, court appearances, sport competition, parties, weddings, work/job on

Saturdays that interfere with class time, and powder days are NOT considered emergencies. Talk to me **ASAP** if you have any questions or concerns.

Lecture Quizzes/ Homework Assignments (5 - 10 pts ea):
You will be given several quizzes and small homework assignments throughout the semester so that you can practice skills and concepts we learn in lecture. I will inform you in class and on D2L when they are due. Chapter quizzes may be given as take home or at the beginning of class or online (*stay tuned this is new technical method for me*). There will be a limited amount of time to complete the quiz questions – be sure you are on time to class as ***quizzes cannot be made-up***. If you are not in class you will receive a zero for the quiz, these will not be posted to D2L or sent out electronically. Quizzes may comprise multiple choice, short answers, 1-paragraph essays, and/or problems to solve. There will also be homework assignments over the course of semester. You are allowed to drop 1 HW assignment or quiz***.*** All Assignments are due at the beginning of class*.* If you know you will miss class, e-mail me copies of your assignment on time to receive full credit. ***Late assignments will be docked 20% and can be turned in within 48 hours after the due date electronically only. After 48 hours, the assignment becomes a zero in the gradebook.***

Lecture Special Projects I & II (2 x 25 pts = 50 pts):
Project I consists of team presentations on Chapter 6 (Overview of the Cell) during class time (1 section from Campbell's Ch6 per group). **Project II** consist of 3 parts: 1) reading/ listening to "current science topics in the in media" throughout the semester, 2) 1-page weekly entry (**14 weeks**) into an electronic journal on science topics relate to what you are learning in class which includes Title of article, media, synopsis of topic, and how it relates to Bio111. 3) Toward the end of the semester, students will prepare and present a brief lecture on a selected current science topic in the news. Detailed instructions will be provided for both.

Lab Exams (2 x 50 pts = 100 pts):
There will be two laboratory exams. Lab exams must be taken on the scheduled dates and ***cannot be made-up***, due to the difficulty of setup. The lab exams will be comprised of multiple choice, true/false, fill-in-the-blank, and short answer questions. Questions will test your knowledge of the content and skills learned during each lab including lab manual case studies, techniques, media, and organisms.

Lab Assignments (10 x 20 pts = 200 pts):
Every week, you will be required to complete the laboratory exercises that are a part of the course. Lab exercises include questions that are meant to help you think about *why* we are doing particular labs and reinforce concepts we learn in lecture and lab. You will complete all pre-lab questions, exercise-related questions, "Reviewing your Knowledge" questions, and "Applying your Knowledge" questions.

To get the most out of your laboratory experience, you should do the following for each of the exercises in the schedule:

1. Completely read the assigned exercises. Read the Lab Addendum-handout–rubric for each lab.
2. For each lab, answer all pre-lab questions in your lab manual prior to lab. Have the T.A. initial these in your lab manual (**and rubric**) at the start of each lab. **This is YOUR responsibility.** These are worth two - **four** points out of the 20 possible points for each lab.
3. Come to lab, fill out Results sections as you work, and answer the associated questions in your lab manual, if time permits or as homework.

You must be present in lab to be given credit for completing the laboratory exercises and answering questions for that week's lab. If you have an excused absence, you will be allowed to turn in lab questions for credit. Due dates are available in the course schedule. If you know you will miss class, e-mail me copies of your pre-lab and/or questions on time to receive full credit.

Lab Assignment Worksheets (11 labs, drop the lowest grade for a total of 100pts):
Labs can only be completed during the weeks listed. Expect to spend the full class in lab each week. *All labs are due at the start of the **LECTURE**, one week after the completion of the lab unless instructed otherwise*. **No late labs will be accepted!** You must turn in your lab by the due date and time for credit.

Conduct/ Participation (25 pts each):

These can include: class and lab attendance (including habitual showing up late and/ or leaving early), classroom behavior, and participation.

Lab Quizzes (5 x 10 pts = 50 pts):
At the beginning of each lab class, you will take a brief quiz related to the lab(s) we will be doing during that class. There will be a limited amount of time to complete the quiz questions – be sure you are on time to class as ***lab quizzes cannot be made-up***. Quiz questions may include questions from in your lab manual, pre-lab assignments, and/or procedural questions based on what we will be doing in class. At the end of the semester, the total number of points accumulated will be scaled to represent 50 possible points. ***To do well on the quizzes, it is important to read and review the lab assigned for that day.***

COURSE POLICIES

Attendance:
Attendance is crucial to your success in this course. Attendance at the laboratory section in which you are enrolled is mandatory. ***Missing more than TWO Saturday lab days (equivalent to 4 lab days for M/W or T/Th) will result in automatic failure of the course*.** Some lab exercises continue through multiple sessions over several weeks. Missing one session, therefore, may make participation in the next lab session(s) difficult or impossible. In the event of a campus closure, it is your responsibility to check the course webpage for any announcements and/or assignments. Unless campus is closed, your attendance is expected.

Attendance in lecture and lab is taken daily with a sign-in sheet. **YOU** are responsible for signing the sign-in sheet; make sure if you are late to class or lab that you sign-in or you will **NOT** receive credit for that day. If for some reason you are unable to attend, you are also responsible for obtaining missed lecture notes from Desire2Learn. Duly note, I assign lecture activities/participation/assignments/quizzes in class, which are done in class and are very beneficial and augment the learning experience. It is highly suggested that you contact one of your fellow students for any information missed in class. Attendance is worth 25 points and will be based on 1) **Lab** and 2) **Lecture attendance/participation/conduct.** I understand that life happens and that you may need to miss a class here and there. However, if excessive absences occur (**more than TWO**) you will be notified and **WILL** result in a penalty (missed points, lower grade or failure of the course). With that being said, situations and circumstances arise that may be out of your control. Please keep me in the loop so that I can work with you to make sure that we set you up for success.

Classroom civility:
Please be courteous to your fellow classmates. Students are not allowed to disturb the learning environment of other students. Actions such as repeatedly arriving late, excessive talking/noise while the instructor or TA is talking, or obvious indifference or disrespect are not allowed. Please show up to both lecture and lab on time. Repeated tardiness will result in loss of points and possible removal from the laboratory. Silence all cell phones during lecture and lab and keep them out of sight. If you use your phone during class time, you **WILL** be asked to leave. Exceptions on emergency basis only- please notify me, and step outside of class to take your call and return to class.

Extra Credit (Bonus points)
There may be several opportunities during the semester to earn extra credits points (by instructor discretion). Lecture and Lab Exams usually contain extra credit questions. Occasionally, I will assign extra credit assignments in class, so be sure to attend lecture in order to receive credit. There is also an optional extra credit RESEARCH assignment worth 30 points. This assignment involves an individual/ or group research project and an accompanying poster/presentation. (At the end of the semester, there is a STEM (Science Technology Engineering and Math) Expo, on campus, which you can participate as part of the Research project. Look for further details during the semester. I will have an informational meeting and supply instructions on D2L. Just be aware that you should not rely solely on extra credit to boost a poor grade. Extra credit mostly benefits students whose grades are borderline between grades.

Class Materials/ Notes

I will supply powerpoint lecture notes and other pertinent class information (such as assignments), handouts, announcements, and grades) by posting these items on Desire2Learn (D2L). I highly recommend that students have access to a computer and check the site regularly (a couple of times a week). I design the study guide directly from lectures, typically. It is advisable to have access to lecture powerpoints and other classroom materials. There are several places on campus where students have access to computer and are allowed to print out pages. At the Lakewood campus, there are computers in the computer room (located next to student life) and in the Learning Commons. At the Arvada campus, there are computers located in the Learning/Computing Commons. **If you are unable to access Desire2Learn please let me know**. We can try to make other arrangements. Online and in-person D2L orientation classes are available thru and on campus.

Tutoring Services Available
Both walk-in, individual tutoring, and study groups session with a tutor (and snacks!) are available in Learning Commons on Lakewood Campus. This is located on the east end of campus from admissions. For additional information about tutoring services and walk-in hours, you can contact Randy Landis-Eigsti at randy.landiseigsti@rrcc.edu 303-914-6736.

Academic Dishonesty:
There is a zero tolerance policy for any form of academic dishonesty in this course. Plagiarism, cheating, or helping someone else violate reasonable standards of academic behavior will not be tolerated. Disciplinary action will be taken against any student found guilty of academic dishonesty such as cheating or plagiarism. Although you will often be working with others in lab, all written work you prepare MUST be your own. If your words match those of others, I will assume you copied rather than composing the answers yourself. The penalty for being dishonest in this way is far greater than simply getting a wrong answer. Those committing academic dishonesty will be subject to disciplinary action up to and including failing the assignment, failing the course, and/or expulsion from the course or college.
A special word regarding plagiarism: this is an extremely serious offense and will result in a zero for work submitted that contains any type of plagiarism, at minimum. To be certain you understand the meaning of plagiarism and are equipped to avoid this in your lab work and other assignments, please review the information provided at this website (https://writing-speech.dartmouth.edu/learning/materials/sources-and-citations-dartmouth). In addition to traditional rules of plagiarism, scientific writing includes a few special ones. When submitting results, unoriginal pictures, charts, diagrams, etc. are considered as plagiarism, regardless of citation. Results must always be original, even if the quality is not as good as what can be found in an "identical" image from the internet, for example. Please also note that with rare exception, scientific writing does NOT use quotes. Therefore, everything you write must be in your own words. If you need help rewording anything, please come see me.

Learning Community: A large percentage of recent advances in biology could not have been accomplished without collaboration between people with different expertise. This class will help you practice skills needed to be successful collaborators (exploration of ideas through discourse, peer-to-peer teaching, sharing of materials, sharing of ideas). If you have an idea, say it. If you think another person has an idea, let them speak and listen. Try not to be a wallflower or a grand stander. When responding to the ideas of others, be critical, constructive, and encouraging. When listening to others' thoughts about your ideas, do not take things personally or be hard on yourself. This is a small class, and I expect that you will assist each other's learning.

Higher-Level Thinking: You are not being asked to accept ideas uncritically. On the contrary, it is essential that you challenge ideas with which you disagree or about which you are skeptical. You should also be able to support ideas with which you agree using appropriate evidence. Some may require knowledge, comprehension, and application. Some work will require more analysis, synthesis, and evaluation.

SUCCESS STRATEGIES FOR THIS CLASS (AND OTHER CLASSES)

- To succeed in this course, it is extremely important to not fall behind on assigned reading and lecture notes. Each lecture builds on previous material and you will get the most out of lectures if you have reviewed the material.
- Attend and pay attention to lectures. Participate in all class activities and discussions.
- Study actively by adding to or re-writing your notes, constructing tables, making your own diagrams, etc. Do not just highlight your book – read actively.
- As you study, write questions on one side of an index card and the answer on the other. Come back to those index cards a few days after to test yourself.
- Study with your classmates. Test each other.
- Study regularly. There is too much material in this course to cram into a few hours of study right before an exam.
- Use the resources in the book and the book web site (www.masteringbiology.com).
- Ask questions when you have them and ask for help when you think you need it.
- Evaluate how you learn (if you don't know). Everyone is different, but assessing your learning process will greatly enhance your studying and test taking skills. There are also many helpful websites. A good website that can help is http://www.vark-learn.com/english/the-vark-questionnaire (© Copyright Version 7.8 (2014) held by VARK Learn Limited, Christchurch, New Zealand).
- There are also many learning support services available to RRCC students. (i.e., free biology tutoring services in the Learning Commons (Lakewood campus) and the Learning Commons at the Arvada campus (or other locations, look for postings) as well as study groups etc.). Refer to the Learning Commons, the Connect to Success Office (Room1250- Lakewood campus) www.rrcc.edu/success or (303) 914-6317 for details. I have posted many of the Connect to Success handouts as well as other helpful handouts on D2L, so check those out

IMPORTANT DATES

STUDENTS: PLEASE VERIFY THE SPECIFIC DROP AND WITHDRAW DATES FOR THIS COURSE IN YOUR "Detailed Student Schedule (with Drop-Withdrawal Dates)" LINK IN THE ROCK, UNDER THE STUDENT TAB (https://erpdnssb.cccs.edu/PRODRRCC/wt_student_sched.P_DisplayStudentSched)

Drop/Census Date (last day to drop with a refund)
This is the last day you can remove yourself from this class without having to pay for the class and without the class showing on your permanent student record. If you are considering dropping the class, please talk to your instructor first. If you are on financial aid, you should also consult a financial aid advisor before dropping a class. All students are encouraged to see an academic advisor about how dropping may affect their goals.

Withdraw date (last day to withdraw with a "W")
This is the last day you can remove yourself from this class and receive a "W" for the class instead of a grade. You are responsible for payment. If you are considering withdrawing from the class, please talk to your instructor first. If you are on financial aid, you should consult a financial aid advisor before withdrawing from a class. All students are encouraged to see an academic advisor about how withdrawing may affect their goals.

TENTATIVE COURSE SCHEDULE

Detailed lecture and lab schedules are provided at the end of this syllabus. Because these schedules are subject to change, be sure you check D2L often and attend class.

RRCC SYLLABUS INSERT – REQUIRED AND ADDITIONAL INFORMATION

All students are required to be familiar with the information contained in the RRCC Syllabus Insert document. In addition to your instructor reviewing the required content in class, the RRCC SYLLABUS

INSERT can be found as an announcement on all D2L landing pages (where you have access to all of your courses) and in the "Student Resources" pull-down menu.

GT PATHWAYS STATEMENT, CONTENT CRITERIA, COMPETENCIES, AND STUDENT LEARNING OUTCOMES

Guaranteed Transfer (GT) Pathways Course Statement:
The Colorado Commission on Higher Education has approved BIO 111 for inclusion in the Guaranteed Transfer (GT) Pathways program in the GT-SC1 category. For transferring students, successful completion with a minimum C– grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, go to CDHE GT Pathways Information. http://highered.colorado.gov/academics/transfers/gtpathways/curriculum.html

CONTENT CRITERIA FOR GT-SC1 COURSES
(1) The lecture content of a GT Pathways science course - Students should be able to:

- Develop foundational knowledge in specific field(s) of science.
- Develop an understanding of the nature and process of science.
- Demonstrate the ability to use scientific methodologies.
- Examine quantitative approaches to study natural phenomena.

(2) The laboratory (either a combined lecture and laboratory, or a separate laboratory tied to a science lecture course) content of a GT Pathways science course - Students should be able to:

- Perform hands-on activities with demonstration and simulation components playing a secondary role.
- Engage in inquiry-based activities.
- Demonstrate the ability to use the scientific method.
- Obtain and interpret data, and communicate the results of inquiry.
- Demonstrate proper technique and safe practices.

COMPETENCIES AND STUDENT LEARNING OUTCOMES FOR GT-SC1 COURSES
(1) GT PATHWAYS COMPETENCY: Inquiry and Analysis
Inquiry is a systematic process of exploring issues/objects/works through the collection and analysis of evidence that results in informed conclusions/judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them.

- Student Learning Outcome (SLO 4): Select or Develop a Design Process
  - Select or develop elements of the methodology or theoretical framework to solve problems in a given discipline.
- Student Learning Outcome (SLO 5): Analyze and Interpret Evidence
  - Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus.
  - Utilize multiple representations to interpret the data.
- Student Learning Outcome (SLO 6): Draw Conclusions
  - State a conclusion based on findings.

(2) GT PATHWAYS COMPETENCY: Quantitative Literacy
Competency in quantitative literacy represents a student's ability to use quantifiable information and mathematical analysis to make connections and draw conclusions. Students with strong quantitative literacy skills understand and can create sophisticated arguments supported by quantitative evidence and can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc.)

- Student Learning Outcome (SLO 1): Interpret Information
  - Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- Student Learning Outcome (SLO 2): Represent Information

- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).

REQUIRED COURSE LEARNING OUTCOMES

1. Define and utilize terminology, specific facts, experimental methodologies, and general concepts related to basic chemistry, cell structure and function, cell reproduction, bio-energetics and genetics.
2. Apply the concepts learned to interpret and analyze new situations.
3. Perform proper procedures and techniques in the laboratory and utilize equipment safely.
4. Describe the impact of biological research and technology on society.
5. Employ scientific methodologies to develop predictions, interpret experimental data, and form conclusions.
6. Communicate scientific information clearly and logically.
7. Represent and interpret biological graphs, tables and other quantitative information.

TOPICAL OUTLINE

Please note the topics below will be integrated throughout the course and not covered exactly in this order. See your lecture and lab schedules for more information.

I. Introduction
   a. Nature of the scientific process
   b. Unifying principles of life

II. Fundamentals of chemistry
   a. Atoms, molecules and bonding
   b. Biologically important molecules
   c. Water and pH

III. Cell structure and function
   a. Prokaryotic and eukaryotic
   b. Microscopy
   c. Organelles and cell structure
   d. Membrane structure and function
   e. Transport mechanisms

IV. Cell reproduction
   a. DNA replication
   b. Mitosis
   c. Meiosis

V. Bio-energetics
   a. Laws of thermodynamics
   b. Aerobic respiration and fermentation
   c. Photosynthesis

VI. Genetics
   a. Mendelian and non-mendelian genetics
   b. Gene expression
   c. Biotechnology

*ONE LAST NOTE:

If at any time during the semester you experience difficulties with any of the above procedures (that is you have an illness, death in the family or any other problems or concerns) please don't hesitate to contact me as soon as possible. I am more than willing to help if you let me know!

Above all it is my hope and goal that you enjoy the class, gain a greater appreciation for life (biology) and have a beneficial learning experience!

LECTURE/LAB SCHEDULE

(subject to change – check D2L often and attend class)

Week	Date	Lecture topic/chapter	Laboratory # and topic
1	Sat 1/25	Introduction to the Course +Handouts Ch1 – Scientific Inquiry & Themes in Biology	Introduction and Lab Safety / Review: metrics system, graphs & tables, sig digits Lab#1 – Scientific Investigation/ *Come prepared to start experiment!*
2	Sat 2/1	Ch1 – Scientific Inquiry Ch2 – Chemical Context of Life/ Ch3 - Water & Life (start) **Quiz1.Ch1 – Themes, Sci. Method**	La#1 –Scientific Investigation **DUE - Lab Metric Assignment** **Quiz1.Lab1 - SciInves**
3	Sat 2/8	Ch3 – Water and Life Ch4 – Carbon and Life **DUE - Terminology Worksheet**	Lab#2 – Introduction to Biology **Quiz2.Lab2 – IntroBio** **DUE – Lab1+Formal Report**
4	Sat 2/15	Ch4 – Carbon and Life/ Ch5 – Large Biological Molecules **Quiz2.Ch2&3 – Chemistry**	La#6 – Models and Chemical Tests **Quiz3.Lab3 – ModelsChem** **DUE – Lab2**
5	Sat 2/22	Ch5 – Large Biological Molecules/ Ch8 – Enzymes and Metabolism **Quiz3.Ch4&5 – Chemistry**	Lab#4 – Enzymes **Quiz4.Lab4 – Enzymes** **DUE – Lab6**
6	Sat 2/29	**LECTURE EXAM #1 (Ch. 1-5)** Ch6 – Tour of the cell **Group presentations (Ch6 sections: 2-7)**	Lab#3 – Microscopes and Cells **Quiz5.Lab3 – Microscope & Cell** **DUE – Lab4**
7	Sat 3/7	Ch7 – Membrane Structure and Function Ch12 – Cell Cycle and Mitosis	La#7 – Membrane Transport **Quiz6.Lab7 – Membrane Transport** **DUE – Lab3**
8	Sat 3/14	Ch12 – Cell Cycle and Mitosis/ Ch9 Ch9 – Cellular Respiration	**Review and Lab Exam 1 (1-4, 6, 7)** **DUE – Lab7**
9	Sat 3/21	**LECTURE EXAM #2 (Ch6 - 8, 12)** Ch9 – Cellular Respiration/ Ch10 - Photosynthesis	Lab#8 – Cell Respiration & Photosynthesis (TP) **Quiz7.Lab8 - Respiration&PhotoSyn**
	Sat 3/28	**Spring Break - No Classes**	**Spring Break - No Classes**

10	Sat 4/4	Ch10 – Photosynthesis Ch13 – Meiosis and Sexual Life Cycle	Lab#8 – Photosynthesis *and* Lab #5 - Mitosis **Quiz8.Lab5A - Mitosis**
11	Sat 4/11	Ch. 16 – DNA Replication Ch. 16 – DNA Replication	Lab#11 – DNA Operations **Quiz9.Lab11 - DNA Operations** **DUE – Lab8 + Formal Report**
12	Sat 4/18	**LECTURE EXAM#3 (Ch9,10,13,16)** Ch17 – Gene Expression: Transcription	Lab#9 – Intro to Genetics (work in groups to solve problems)/ **Quiz10.Lab9 - IntroGenetics** Catch-up Lecture Day
13	Sat 4/25	Ch17 – Gene Expression: Translation Ch. 14 Mendel and the Gene Idea	Lab#5 – Meiosis *and* Presentations (SPII) **Quiz11.Lab5B -Meiosis**
14	Sat 5/2	Ch14 – Mendel and the Gene Idea Ch15 – Chromosomal Basis of Inheritance Scan Ch18, 20 – Gene Control and Biotechnology (TP*)	Lab#10 – Life Zones (HW*) **Field Trip is optional (extra credit) join another class during the week** Catch-up Day- Presentations & Lecture **Quiz12.Lab10 - LifeZones**
15	Sat 5/9	**FINAL COMPREHENSIVE EXAM (Ch14,15,17,18*,20*+ Ch 1-13)**	**Review and Lab Exam 2 (5, 8-11)**

Lecture Schedule Additional Info

NOTE: The Lecture schedule is tentative and is subject to change. Sometimes lectures take longer than anticipated due to instructor being verbose and questions from students that might arise. A weekly **update** will be provided on D2L called REMINDERS/ ASSIGNMENTS/ ANNOUNCEMENTS which will include any changes. If you are not sure about anything, please ask!

Important dates for lecture *(subject to change – check D2L often and attend class)*:

Terminology worksheet due- 2/8

Lecture Exam 1 – 2/29

Lecture Exam 2 – 3/21

Spring Break week of 3/28 – no class

Lecture Exam 3 – 4/18

Special Project II presentation due (submit online & hard copy) – 4/25

FINAL Comprehensive Exam – 5/9

Lab Manual Worksheet Due Dates and Lab Exams *(subject to change – check D2L often and attend class)*

Lab #1 + Formal Lab Write-up due **2/8**

Lab #2 + Formal Lab Write-up due **2/15**

Lab #6 due **2/22**

Lab # 4 due **2/29**

Lab #3 due **3/7**

Lab #7 due **3/14**

Lab Exam #1 – 3/14

Lab #8 + Formal Lab Write-up (Cell Respiration only) due **4/11**

Lab #11 due **4/18**

Lab #5 Mitosis & Meiosis due **5/2**

Lab # 9 due **4/25** ***5 pts EXTRA CREDIT FOR HANDING IN EARLY day of lab on 4/18 (can be done complete on own as Homework)***

Lab #10 due **5/9** (Note: Lab #10 can be done completely as homework – 5 points EXTRA CREDIT if completed day of lab on 5/2). ***Field Trip is optional*** *– contact me EARLY in the SEMESTERs if you are interested in participating in field trip with a another Bio111 lab during the week of April 27th.*

Lab Exam #2 – 5/9

***TP = Time Permits; HO = Handout; WS = Worksheet; cont. = continue; HW = homework; * = only certain sections (scanned)**