

# BSC 2010 – Integrated Principles of Biology I

Syllabus for 0485, 0486, 0487

Spring 2014

## I. Class Meetings

Monday, Wednesday, Friday			
Section 0483	Period 2	8:30 AM–9:20 AM	McCarty Hall C 100
Section 0485	Period 3	9:35 AM–10:25 AM	McCarty Hall C 100
Section 0484	Period 6	12:50 PM–1:40 PM	Carleton Auditorium

Online Exercises and Tutorials are continuously available; particular assignments will be posted regularly.

## II. BSC Laboratory Courses

The BSC laboratory courses (BSC 2010L and BSC 2011L) are managed separately from the BSC lecture courses. Please read the information available at the BSC Website (<http://www.bsc.ufl.edu>) for more information on the laboratory courses.

## III. Instructors

### Dr. Mi-Jeong Yoo, PhD

Department of Biology

Office: 310 Bartram

Office Hours: Thursday & Friday period 7 or by appointment

E-mail: [yymy@ufl.edu](mailto:yymy@ufl.edu) PLEASE COMMUNICATE THROUGH SAKAI MAIL!

### [Dr. Charles F. Baer, PhD](#)

Department of Biology

Office: 621 Bartram Hall

Office Hours: Monday periods 8-9 (3:00-4:55 pm) or by appointment

E-mail: [cbaer@ufl.edu](mailto:cbaer@ufl.edu) PLEASE COMMUNICATE THROUGH SAKAI MAIL!

### Dr. Norman A. Douglas, PhD

Department of Biology

Office: 410 Carr Hall

Office Hours: TBA

E-mail: [nadouglas@ufl.edu](mailto:nadouglas@ufl.edu) PLEASE COMMUNICATE THROUGH SAKAI MAIL!

### Katrina Cuddy (Discussion Leader and Online Instructor)

Graduate Teaching Assistant

Department of Biology

Office: 310 Bartram Hall

Office Hours: Mon 6:30-7:30 pm, Tues P. 3 (9:35-10:25 am) or by app't

E-mail: [kkcuddy@ufl.edu](mailto:kkcuddy@ufl.edu) PLEASE COMMUNICATE THROUGH .ufl EMAIL!

#### IV. Expectations

Each student is solely responsible for reading and following the instructions, guidelines and schedules in this syllabus. Not having read the information in this syllabus will not constitute an excuse for missing an assignment, exam, or other assessment.

#### V. E-mail Communication

All e-mail correspondence to course instructors must **take place through the "Mail" feature in Sakai. We will reply to you through Sakai mail; we will try to answer correspondence within 24 hours, but we make no promises.**

**All correspondence regarding the online assignments (*BioPortal*) must be sent to the Online Instructor (Ms. Katrina Cuddy) through .ufl email.**

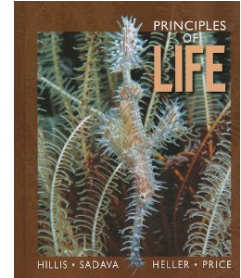
#### VI. Course Resources

##### A. Textbook

*Principles of Life*, by Hillis, Sadava, Heller, & Price, Sinauer Associates and W.H. Freeman (publisher)

Textbook publisher web site: <http://courses.bfwpub.com/hillis1e.php>.

There are current versions of the textbook on reserve at the Marston Science Library. Visit the Reserve Materials area to check out these copies.



##### B. Online Resources and Electronic Textbook

*BioPortal* is an online assignments and tutorial system from the textbook publisher. It is required for this course and is available with or without an e-book. Each new copy of the *Principles of Life* textbook comes automatically packaged with *BioPortal* and an e-book. Alternatively, you may access *BioPortal* and the e-book by making a standalone purchase either online at <http://courses.bfwpub.com/hillis1e.php> or through the bookstore. If you purchase a used textbook you will still need access to *BioPortal*, but if you do not want the e-book, you may also purchase this at a reduced rate either online or through the bookstore.

You may sign up for an eTextbook digital rental for 1 year for approximately \$45 at CourseSmart: <http://www.coursesmart.com/9781429257213>

The *BioPortal* website is: <http://courses.bfwpub.com/hillis1e.php>. When setting up your account, **you must use your Gatorlink (ufl.edu) e-mail address, which will be your username.** Using an e-mail address other than your UFL e-mail address will result in receive NO credit for all assignments administrated through *BioPortal*. This cannot be changed after registration, thus be sure to register correctly.

**For help with *BioPortal*, contact *BioPortal* Technical Support:** 1-800-936-6899 (phone) or [techsupport@bfwpub.com](mailto:techsupport@bfwpub.com) (e-mail).

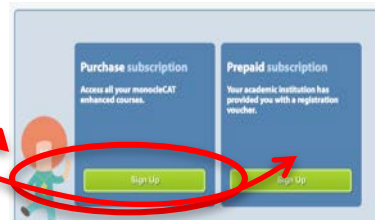
##### C. Classroom Response System (Clicker)

We will use the Top Hat Monocle (THM) Classroom Response System (CRS) for quiz questions during class. THM allows students to use a cell phone (text messaging), laptop, tablet, smartphone, or an iPod touch to participate in class. Students who are enrolled in this course prior to the first day of class will receive an automated e-mail from the TopHat system with registration links. For students that enroll in this class late, follow these instructions to register:

1. Go to <https://www.tophatmonocle.com/register/>
2. Click "Continue" under "Student"



- Click "Sign Up" under "Purchase subscription".  
If you purchased a license key from the bookstore, click "Sign Up" under "Prepaid Subscription".



- Fill in all account details:

**You must use your Gatorlink ID for your "Username" and your "Student ID"**

Example: If your e-mail address is albert@ufl.edu, use *albert* NOT your 8-digit numerical UF ID (e.g., 1234-5678).

If the "Username" is already taken, you may add a few numbers to the end (e.g., *albert123*). Your "Student ID" must be your Gatorlink ID however.

For "School" choose "University of Florida".

We recommend that you choose the \$38 option for five years of access (see explanation below).

- Click "Process My Order".

**Important:** your Student ID should be all lowercase, and be careful not to enter a space afterwards! The reason the TopHat StudentID must match your UF Gatorlink ID exactly is that this is how your grades are transferred to UF e-learning gradebook, and *if it does not match, you will not get credit for your TopHat submissions.*

Important note about purchasing THM license keys (prepaid subscriptions) at the bookstore: You can purchase prepaid subscriptions for THM at the UF Bookstore. A 5-year subscription will cost \$50.75 (instead of \$38.00 if purchased from the THM website) and a 4-month (semester) subscription will cost \$26.75 (instead of \$20.00 if purchased from the THM website). However, purchasing the THM subscription at the bookstore may benefit those students with financial aid. Note that THM will be used in both BSC 2010 and BSC 2011 as well as in other upper division courses offered through the Biology Department. Thus, it is advantageous to purchase the 5-year subscription rather than a single semester subscription.

**For problems with Top Hat Monocle, call the following support number:** 1-888-663-5491 or e-mail [support@tophatmonocle.com](mailto:support@tophatmonocle.com)

Additional Top Hat Monocle information is posted on the e-Learning website under "Resources".

**D. Course Website (e-Learning)**

Class material including the syllabus, discussion readings, problem sets, exam results, lecture notes and other information related to the course will be posted on the course e-Learning website (<http://lss.at.ufl.edu>). You are responsible for **all** announcements made in lecture and/or posted on the course website for this class. For help with e-Learning, call the UF Computing Help Desk at 352-392-4357, or visit the e-Learning support website: <https://lss.at.ufl.edu/help.shtml>.

## VII. Online Instruction Information

Online Instructor: **Katrina Cuddy**

E-mail address: [kkcuddy@ufl.edu](mailto:kkcuddy@ufl.edu) **PLEASE COMMUNICATE THROUGH .UFLMAIL!**

As part of BSC 2010, you are required to complete online assignments that will account for 12% of your overall grade. If at any time you have questions about these assignments, please contact the Online Instructor (Ms. Katrina Cuddy). **DO NOT contact the Lecturer for questions about online homework completed through BioPortal.** Online assignments will be completed online at the BioPortal website: (<http://courses.bfwpub.com/hillis1e.php>; see instructions posted on e-Learning on how to access website). A schedule will be posted on e-Learning with the due dates for each assignment. **All assignments must be completed by the stated due date and time for credit. Extensions will NOT be given because of technical or personal issues that occur within 24 hours of the assignment deadline.** Most assignments will also have a set time limit, so make sure you have time to devote to that assignment before you begin. You are expected to work by yourself on the assignments and cheating will not be tolerated.

Note that all due dates for assignments are clearly posted on the BioPortal Assignments tab and reflect the most up-to-date information. On this page you can also see your grade on an assignment and its status (e.g., complete, or due in x days). Also, there are many other resources available on BioPortal to help you study material from your textbook, such as Diagnostic quizzes, Flashcards, Interactive chapter summaries, etc. Items that are NOT on the assignments page will not be graded, but we still encourage you to use them to help you study.

**If you have technical difficulties, please contact *BioPortal* Technical Support: 1-800-936-6899** (phone) or [techsupport@bfwpub.com](mailto:techsupport@bfwpub.com) (e-mail).

To facilitate discussion, a discussion forum will set up in e-Learning / Sakai. Any questions regarding the lecture material or the online assignments should be posted there, so that your fellow students will be able to provide answers. Don't be shy about asking questions; after all, if you are confused about the material there will almost certainly be other students with the same questions.

### Communication with Your Online Instructor

When you have a question about the *BioPortal* assignments, check the following sources first to see if it is already answered, **before** e-mailing your Online Instructor:

- Course Syllabus
- e-Learning announcements (this is the primary means that your Online Instructor has to communicate with you in a timely manner)
- e-Learning Discussion FAQ
- e-Learning Discussion General Posts

If you still cannot find the answer to your questions:

- If it is a question that others might find useful to know the answer to as well, post it in the e-Learning Discussion section.
- If it is a question specific to you (e.g. account or grade specific), e-mail Ms. Cuddy. Barring

unusual circumstances, expect a reply with 24 hours. E-mails and e-Learning Discussion posts are checked at least once per day, but sometimes not more than that.

**If there is a technical problem with accessing *BioPortal* or a particular assignment within *BioPortal*, you must contact *BioPortal* technical support FIRST. *BioPortal* tech support is the only one who can fix technical issues with the site.** Then contact the Online Instructor at least 48 hours prior to the deadline, so appropriate steps can be taken to fix the issue and appropriate extensions can be given if necessary. (Thus, check early that you can access the assignments. You will not be granted an extension for technical problems, if you do not contact the Online Instructor before the deadline.) As a student at UF, it is your responsibility to either maintain a reliable Internet connection or access computer resources on campus.

**Repeated for emphasis: for technical problems with *BioPortal* you must contact *BioPortal* Tech support FIRST, and then reported to the Online Instructor at least 48 hours prior to the submission deadline, no exceptions!**

#### **Grading of Online Exercises:**

The online exercises account for 12% of the total course points. There are several different types of assignments that students will have to complete. For any quizzes, you will be graded based on number of questions answered correctly out of total number of questions on your FIRST quiz submission! For all other assignment types (activities, tutorials, etc.) you will receive full credit upon completion. There are no make-ups available for *BioPortal* assignments. Once assigned, assignments are available online at all times up until the deadlines. ALL *BioPortal* assignments for a section of the class (i.e., all the lectures given by a particular instructor) are due at 5:00 pm the DAY BEFORE the exam covering that section (for example, if the exam is on the 4th, *BioPortal* assignments are due by 5:00 pm on the 3rd). Because they are assigned far in advance of the due date, *BioPortal* assignments that are not completed\*\* by the due date CANNOT BE MADE UP, with one exception. If there is a technical problem with accessing *BioPortal* or a particular assignment within *BioPortal*, you must contact *BioPortal* technical support AND the online instructor at least 48 hours prior to the deadline, so appropriate steps can be taken to fix the issue and appropriate extensions can be given if necessary. (Thus, check early that you can access the assignments. You will not be granted an extension for technical problems, if you do not contact the online instructor at least 48 hours before the deadline.)

**\*\*Repeated for emphasis: technical problems must be reported to the online instructor at least 48 hours prior to the submission deadline, no exceptions!**

#### **Important information about pace:**

We are giving you all of the assignments for each third of the course at once, and giving you at least three weeks or more to complete them. You have the freedom to go at a pace of your choosing, but you should not leave yourself too much work at the deadline. The assignments have been listed in an order that complements the lecture, and it is up to you if you want to go over the material for a given chapter before the lecture, which helps understand the lecture in greater detail, or just after each lecture to help reinforce the material and prepare for the exam. The only thing we do not recommend is to leave all the assignments until right before the deadline! You can always go back and re-do the assignments after you have submitted them for a grade, as a study aid.

To reiterate, deadlines are at 5:00 pm on specified dates, which will be the day before each exam.

***BioPortal* grades will be transferred to UF E-learning after each exam, but will also be viewable at any time on the *BioPortal* website.**

## VIII. Supplemental Instruction

In Supplemental Instruction (SI), a trained student peer attends the class and then leads group sessions to focus on the challenging concepts and problems in the course. **SI is purely voluntary**; you can attend as often as you like, provided there is space (this is a first-come, first-served program). The sessions are collaborative, in that you will be working with classmates to better understand the material. The SI leaders will show you effective strategies for studying the course material, which you will have a chance to practice together, and the SI leaders will give you a chance to ask questions or pose your own concerns.

Refer to the SI e-Learning site for the locations and schedules of the SI sessions. More information is available at the UF Supplemental Instruction Home Page:

[https://teachingcenter.ufl.edu/supplemental\\_instruction.html](https://teachingcenter.ufl.edu/supplemental_instruction.html).

## IX. Assessments and Grading

### A. Exams

There will be three "midterm" exams, but no cumulative "final" exam. The midterm exams will be administered during the normal semester and during the normal class meeting times. Each exam will cover material from lecture, the online discussions, and the assigned reading in the textbook. The exams will **not** be cumulative. Each exam will be worth approximately 28% (=83.3%/3) of the course grade.

All exams will be multiple-choice and machine graded. Answer sheets will be provided and must be filled in using a #2 or softer pencil. **Each student must take the exam during her/his registered section time. Each student must bring her/his Gator ID to class on exam days.** No student will be allowed to start an exam after the first student to complete an exam leaves the classroom. All exams and answer sheets will be collected at the end of the exam period. No additional time will be given to complete an exam if you arrive late (in other words, if you begin an exam late, you will have less time to complete it). Please be aware that filling in the scantron sheets is part of the exam; no extra time at the end of the class period will be given for filling out the scantron sheets.

Your scantron sheets will be available for review within one week of the exam date; **there will be only ONE opportunity to review your exam.** A three hour time block will be announced the day after the exam; in this announcement, you will be given a doodle link to sign up for an appointment time. Exams will **not** be available for review after the semester has ended.

*Make-up Exams:* No make-up exams will be given without documentation of illness or prior permission for other personal reasons (e.g., a wedding, a job interview, etc). Students that will be missing an exam due to a pre-arranged university-approved excused absence (sports, etc.) or other personal reason should let the instructor know **a minimum of two weeks in advance.**

In case of illness on exam day, a letter from the student's primary care provider is required. This letter must state that the student was unable to complete the exam on the scheduled date (i.e., a letter stating only that the student was seen in a clinic is not sufficient). An emergency non-medical personal matter (e.g., a death in the family) requires a note from the Dean of Students (P202 Peabody Hall). These notes must be received within five business days after the exam.

Make-up exams. Make-up exams will be given **ONLY** during a single two-hour period, from 8-10 am two days after the last day of Spring classes (Friday, April 25). Make-up exams will consist of ten essay questions and you can expect them to be significantly more challenging than the in-class exams.

Online Assignments

The online exercises and assessments account for 12% of the total course points. Additional information about the *BioPortal* exercises and assessments will be provided by the Online Instructor (see also Section VII, above).

There are **NO** make-ups available for *BioPortal* assignments.

#### In-Class Quiz "Clicker" Questions

In-class quizzes administered via the classroom response system (TopHat Monocle, see above) account for 5% of the total course points. To clarify, 18 total points will be awarded for Top Hat Monocle (THM) quizzes; 6 points from each lecture unit of the course. The points earned will reflect the proportion of THM questions answered correctly in class. Each question posed will be worth one point for a correct answer and zero points for an incorrect answer (i.e., we don't give "show-up points" - you gotta earn 'em). For each course lecture unit, full in-class quiz credit (6 course points) will be awarded to all students achieving 2/3 of the total possible THM points from that unit; those achieving less than 2/3 will receive course points in proportion to their achieved THM points (e.g. 50% of THM points earned = 3 course points).

Students may not make up THM questions, regardless of the reason (e.g., absence, malfunctioning cell phone, forgot to register, etc.). It is the student's responsibility to regularly check (i.e., daily or weekly) their gradebook in THM to ensure that their submissions were correctly received, and to contact THM support to resolve any issues with submissions not being properly recorded in the THM gradebook in a timely manner.

#### B. Extra Credit

No mechanisms for extra credit are available. So don't ask!

#### C. Grading

Assessment	Points per Unit	Total Point	% of Total Points
Exams	100	300	83.3
<i>BioPortal</i>	14	42	11.7
THM	6	18	5.0
<b>TOTAL</b>	<b>120</b>	<b>360</b>	<b>100.0</b>

All grades will be posted on e-Learning (in terms of course points, i.e., the point scheme above), and it is the responsibility of the student to check their grades on e-Learning and make sure they match their grades on *BioPortal* and THM. If there is a discrepancy you must let us know with ONE week of the grade being posted on eLearning.

MINIMUM grade cutoffs are listed below, which is to say if your cumulative point total is 90% of the maximum you are GUARANTEED an A, if you make 80% of the maximum you are GUARANTEED a B, etc. HOWEVER, we reserve the right to be more generous, i.e., to "curve downward". For each exam we will announce a TENTATIVE, APPROXIMATE grade scale, but the final grade distribution (i.e., the "curve") will only be decided after all assignments have been completed and scored.

Point Range (%)	Letter Grade
≥ 90.00	A
≥ 86.66	A–
≥ 83.33	B+
≥ 80.00	B
≥ 76.66	B–
≥ 73.33	C+
≥ 70	C
≥ 66.66	C–
≥ 63.33	D+
≥ 60	D
≥ 56.66	D–
< 56.66	E

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

## X. Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

*“I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.”*

In addition, on all work submitted for credit the following pledge is either required or implied:

*“On my honor I have neither given nor received unauthorized aid in doing this assignment.”*

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: <https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty>.

## XI. Attendance

Attendance is not required, but students are expected to attend all classes and are responsible for all material covered during the lecture, including announcements. **In addition, your attendance is necessary to earn points for “clicker” (THM) quizzes; such points cannot be made up.** Students are strongly encouraged to read the assigned chapters before coming to class as this will make it easier to comprehend the lecture material. If you miss class, visit the e-Learning site for any lecture notes and course announcements.

## XII. Time Commitment

The UF College of Liberal Arts and Sciences expects that each student will devote 3-4 hours per week per credit-hour to each course, including time in lectures and labs. Because BSC 2010 is 3 credits, each student should therefore expect to devote 9-12 hours per week to this course. A recommended time allocation is below.



Activity	Hours per Week
Lectures	3
Online Exercises	1-2
Textbook Readings	2-3
Review and Study	2-4

If you find yourself spending more than 12 hours per week on average on these activities, discuss this with your course instructor to see if you can refine your study habits. If you find yourself spending less than 9 hours per week on average, you should recognize that you may have difficulty learning and comprehending the material in this time, and this will probably be reflected in poor performance on the various assessments, causing you to receive a lower overall course grade.

### XIII. Conduct in Class

Please be courteous and do not talk during lecture. This can be distracting to other students and the instructor.

Use of electronic devices in class to take notes or otherwise participate in classroom activities is approved. Approved electronic devices are laptop computers, cell phones, smart phones, tablets, iPod touch, and voice recording devices. Other uses of these devices or the use of unapproved devices will be considered disruptive. Unapproved electronic devices include video recorders, digital cameras and MP3 players. Students who use unapproved devices in class will be considered disruptive. Multiple disruptions will be considered grounds for the assignment of a failing grade.

### XIV. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drc/>. Note that the student should provide documentation of a requirement for accommodation **by the second week of classes**. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

### XV. Counseling Center

Many students experience test anxiety and other stress related problems. "[A Self Help Guide for Students](#)" as well as a diverse array of support systems are available through the UF Counseling and Wellness Center (3190 Radio Road, 392-1575, <http://www.counsel.ufl.edu/>).

## XVI. Lecture Schedule

Lecture topics for this course are listed below. This is a tentative schedule; the dates and coverage of specific topics are subject to change.

Day/Date	Lecture #	Topic	Chapter
		<b>Dr. Yoo's Cells Lectures</b>	
Mon Jan 6		Introduction	
Wed Jan 8	1	Principles of Life	1
Fri Jan 10	2	Atoms and Molecules	2
Mon Jan 13	3	Carbohydrates and Lipids; Biochemical Changes Involve Energy	2
Wed Jan 15	4	Nucleic Acids and Proteins	3
Fri Jan 17	5	Proteins (cont.) and Enzymes	3
Mon Jan 20		<b>NO CLASS - M. L. King Holiday</b>	
Wed Jan 22	6	Enzymes (cont.)	3
Fri Jan 24	7	Cells, Prokaryotic Cells, and Eukaryotic Cells	4
Mon Jan 27	8	Eukaryotic Cells (cont.), Cytoskeleton, and Extracellular Structures	4
Wed Jan 29	9	Cell Membranes	5
Fri Jan 31	10	Cell Membranes (cont.) and Signaling	5
Mon Feb 3	11	Metabolism	6
Wed Feb 5	12	Cellular Respiration	6
Fri Feb 7	13	Photosynthesis	6
		<b>Dr. Baer's Genetics/Molecular Biology Lectures</b>	
Mon Feb 10	1	Cell cycle and cell division I. Mitosis	7
Wed Feb 12		<b>EXAM 1</b>	
Fri Feb 14	2	Cell cycle and cell division II. Meiosis	7
Mon Feb 17	3	Transmission Genetics I. Mendel's Laws	8
Wed Feb 19	4	Transmission Genetics II. Recombination	8
Fri Feb 21	5	DNA and Heredity I	9
Mon Feb 24	6	DNA and Heredity II	9
Wed Feb 26	7	Gene Expression I. Transcription	10
Fri Feb 28	8	Gene Expression II. Translation	10
M-F Mar 3-7		<b>NO CLASS - Spring Break</b>	
Mon Mar 10	9	Regulation of Gene Expression I. Prokaryotes	11
Wed Mar 12	10	Regulation of Gene Expression II. Eukaryotes	11
Fri Mar 14	11	Genomes and "omics"	12
Mon Mar 17	12	Biotechnology	13

Wed Mar 19	13	Genetics and Development	14
		<b>Dr. Douglas' Evolutionary Biology Lectures</b>	
Fri Mar 21	1	What is evolution?; History of evolutionary thought	15, 41.1
Mon Mar 24	2	Natural Selection	15
Wed Mar 26		<b>EXAM 2</b>	
Fri Mar 28	3	Sexual Selection and other types of selection	15
Mon Mar 31	4	Hardy-Weinberg and the forces of evolution	15
Wed Apr 2	5	Molecular Evolution	15
Fri Apr 4	6	Evolution of Sex; Practical Applications	15
Mon Apr 7	7	Species and Speciation	15
Wed Apr 9	8	Modes of Speciation	17
Fri Apr 11	9	Introduction to Phylogenies	17
Mon Apr 14	10	Reconstructing Phylogenies	16
Wed Apr 16	11	Using phylogenies to ask evolutionary questions	16
Fri Apr 18	12	History of Life	16
Mon Apr 21	13	Origins and Diversity of Life	18
Wed Apr 23		<b>EXAM 3</b>	