

**Capstone Theme: *INVASION BIOLOGY***  
**Your Capstone Mentor: Dr. Romi L. Burks; @ProfRomi**  
**Chair & Professor of Biology**



**Semester Class Time:** 8:30 – 9:45 am Tuesday and Thursdays, Fondren Jones 148  
**Office:** Fondren Jones 141; Office Phone: 512-863-1280  
**Office Hours:** Monday/Tuesday/Thursday 2-4 pm or by appointment  
**Email:** [burksr@southwestern.edu](mailto:burksr@southwestern.edu) Webpage: [www.profromi.com](http://www.profromi.com)  
**Cell Phone:** 512-869-8098 (avoid calls before 8 a.m. or after 9 p.m. unless emergency)

Biology Capstone is a course for senior biology students, in which you investigate advanced topics in biology, integrating the concepts and knowledge you have gained from previous courses taken in the major. In this capstone seminar, we will explore the theme of invasion. Generically, one could define invasion as “an incursion by a large number of things into a place.” Typically, I think about biological invasions where non-native species colonize a new habitat, establish a population and spread. However, the theme of invasion expands much more beyond just species – extending to the genetic, cell and molecular levels. **It will be your capstone objective to connect your own interests in biology to this theme.** The processes of “invasion” have implications for behavior, cancer, reproduction, evolution and disease ecology.

As a part of the seminar, each student will write a focused literature review on invasion and give an oral presentation about the findings. Students will lead and participate in peer discussions of research papers, help themselves and their peers prepare for the ETS Major Field Test in Biology, and reflect on their biology experience. During class times, students will take the Collegiate Learning Assessment (CLA), the ETS Major Field Test in Biology and complete the Biology exit survey. In addition, they will attend all department seminars.

**My Goal:** My goal is that every student does well in this course and has a good experience in their biology capstone. Please come in to see me if you are having difficulty, or not doing as well as you would like in the course. Often, I can offer suggestions on how you can better prepare for class and be more effective in your writing and studying.

### Course Learning Objectives

Biology capstone students should:

1. Demonstrate the ability to locate, critically evaluate, and summarize research literature on a specific biological topic.
2. Lead peer discussion and contribute constructively to discussion of scientific, primary research papers.
3. Give a formal oral presentation of a biology research project, internship, literature review, grant proposal, or other relevant topic.
4. Write a scientific research or review paper for a scientific audience, which includes review and synthesis of primary literature.
5. Reflect on the biology experience at Southwestern University by completing the Biology Exit Survey and writing a reflection essay on their biology experience.
6. Demonstrate mastery of biology content by taking and passing the Major Field Exam in biology.
7. Discuss in a written essay insightful and meaningful connections among concepts from cellular/molecular, ecology, evolution and population courses. At least one connection must be between the areas of cell/molecular and population/ecology/evolution.
8. Understand the scientific process from hypothesis formation to support of conclusions.



## Capstone Components

### 1. Proposal and Research– 25% of grade

**100 points**

Students will develop a novel question of their own about some aspect of “invasion” and then investigate that question into a review paper using the primary literature.

<u>Components</u>	<u>Points</u>	<u>Date</u>
A. Identification of area of interest in invasion biology	10 pts	Tues 9/11
B. Development and isolation of research question	15 pts	Tues 9/18
C. Proposal for literature research	25 pts	Thurs 9/27
<ul style="list-style-type: none"> <li>• Revised question</li> <li>• Intellectual Merit &amp; Broader Impacts</li> <li>• Literature Search Approach (keywords)</li> <li>• Statistical Analysis Strategy</li> <li>• Anticipated Figure</li> </ul>		
D. Annotated bibliography (minimum 15 papers)	50 pts	Tues 10/4
<ul style="list-style-type: none"> <li>• Provides information used from paper</li> <li>• Correctly cited – <b>see Citation Guide</b></li> </ul>		

**You should submit all work electronically to Moodle but also bring a paper copy to class when noted on the day-by-day schedule or with instruction from Dr. Burks.**

### 2. Literature Review – 30% of grade

**120 points**

The resulting review paper will include at least one quantitative analysis and one figure or table related to the research question. It will include the typical scientific paper sections including an Abstract, Background/Introduction, Methods, Results and Discussion.

<u>Components – DUE BEGINNING OF CLASS</u>	<u>Points</u>	<u>Date</u>
A. Outline	10 pts	Thurs 10/6
B. First Draft/Developed Outline	10 pts	Tues, 10/16
C. Peer Review	20 pts	Thurs, 10/18
D. Second Version	20 pts	Tues, 10/30
E. Response to Peer Review	20 pts	Tues, 11/6
F. Final Paper	40 pts	Tues, 11/20

### 3. Pair MFT Prep – 5% of grade

**20 points**

As a pair, students will identify a specific topic covered by the Major Field Test that warrants more focus within a subject area of Organismal Biology or Population Biology, Evolution and Ecology. Students will prepare a quick review sheet and design an interactive exercise (20-25 minutes) for class.

To pass the Biology Capstone course, students must also take and receive a passing grade on the Biology Major Field Exam. Students not reaching the expected minimum on the electronic exam will then meet with pertinent faculty for an oral exam on sections that did not meet the expected standard. Students must also complete the Biology Exit Survey. Any student failing to pass the Biology Major Field Exam or who does not complete the Biology Exit Exam will receive a failing grade in the course.

#### 4. Research Presentations – 20% of grade

80 points

Students will give three presentations during the course. The first will focus on a primary literature paper related to their research question on invasion. The second will be a 10-12 minute talk (with 3 minutes available for questions) similar to what would occur at a scientific meeting. The third will be a public, 5-minute INSPIRE talk to the greater community.

<u>Components</u>	<u>Points</u>	<u>Date</u>
1. PL Presentation	20	variable
2. A professional meeting-like presentation	40	11/27 & 11/29
3. 5-minute INSPIRE talk to greater community	20	Friday, 12/7

**Primary Literature Presentation:** Each student in the class will lead a peer discussion of a paper related to their question in invasion biology. For each discussion, the leader should have carefully read the paper and prepared a series of questions for the class to consider. Dr. Burks needs to approve the chosen primary literature at least seven days prior to the discussion and a copy or link to the paper should be made available to the instructor at least seven days prior to date of the discussion. Other students in the class who are not leading discussion should have read the paper and come to class ready to discuss it.

**Each student should prepare and must turn in at the beginning of class a list of 2-3 appropriate questions about the paper on the day of the discussion.**

#### 5. Participation and Engagement -20% of grade

80 points

In addition to day-to-day writing, students will write three reflections (minimum 500 words) in the capstone course.

<u>Components</u>	<u>Points</u>	<u>Date</u>
A. Biology Major Reflection (see Moodle prompt)	10 pts	Thurs, 11/1
B. Paideia Connections	10 pts	Tues, 12/4
C. Biology Seminars (see Moodle prompt)	10 pts	Thurs, 12/6
D. Class Participation	40 points	everyday
a. MFT		
b. CLA		

**Biology Reflections:** Throughout the course, we will be discussing our experiences in the biology program at Southwestern, what we have learned, what we liked, what we disliked, what was fun, and what was memorable. Drawing from these discussions, each student will write reflection essay on their personal biology experience.

**Paideia Connections Essay:** Each student must discuss in a written essay insightful and meaningful connections among concepts from the cellular/molecular, ecology, evolution and population courses they have taken while at Southwestern. At least one of the connections discussed must be between the areas of cell/molecular biology and population/ecology/evolutionary biology.

**Participation:** To foster quality participation and provide early incentives for students to contribute thoughtfully in class, participate in activities and work effectively in groups, you can earn 40 points (10%) towards the total course grade for the Capstone. You will provide a reflective self-evaluation for this part of the course to which Dr. Burks will adjust if necessary based on classroom observations. The following serves as a guideline:

34 - 40 points: No unexcused absences, nearly always on time, impromptu valuable contributions made to class routinely, prepared for and engaged for class activities including questions of primary literature papers, exhibits enthusiasm for learning.

28 - 33 points: No more than 1 unexcused absence, usually on time, sometimes makes valuable contributions impromptu to class (~once every 2 weeks), positive attitude, completes average contribution to group and shows effort in class.

27 or Below: More than one unexcused absences, often late, infrequent contributions to class (1-2 per course), does not contribute 100% to group, unengaged; seems to lack focus.

#### Course Grading Scale

100-99 =	A+	83-86 =	B	70-72 =	C-	59-0 =	F
93-98 =	A	80-82 =	B-	67-69 =	D+		
90-92 =	A-	77-79 =	C+	63-66 =	D		
87-89 =	B+	73-76 =	C	60-62 =	D-		

#### GENERAL POLICIES:

##### Accessibility, Academic Success, Student Distress:

All of us learn in slightly different ways and I try to design my courses so that there are multiple means of accessing class information, multiple ways to take part in class activities, and multiple avenues for being assessed on class work. If there are circumstances that may affect your performance in this class, please let me know as soon as possible so that we can work together to develop strategies for adapting assignments to meet both your needs and the requirements of the course. If you have documented disabilities, please see paragraph below.

It is Southwestern University policy to make reasonable accommodations for students with documented disabilities. To arrange accommodations students should contact the Assistant Director of Academic Success within the Center for Academic Success and Records (CASAR in the Prothro Center room 120; phone 863-1286). Students seeking accommodations should notify the Assistant Director of Academic Success at least two weeks before needed. It is the student's responsibility to discuss any necessary accommodations with the appropriate faculty member. Please take advantage of the CASAR workshops and resources tailored to the first year experience that might help you. In addition, any student who has

any life difficulties (it happens) and believes this may affect their performance in the course, is urged to contact any director in the division of Student Life for support.

**Honor Code:** All work in this course needs to adhere to the Honor Code, which the Student Handbook describes in detail. Please pay special attention to the discussion of plagiarism. I encourage group work and discussion among you all, but do independent work on your own (feel free to discuss the topic with classmates, etc., but when you sit down to write, you should do that on your own). You will also need to be careful with how you use your research sources—summarizing and/or paraphrasing an author’s ideas requires citation. The Honor Pledge, which you will write on exams, quizzes, essays and other work you submit for grades for all of your coursework at Southwestern (unless otherwise indicated by your professor) is: **"I have acted with honesty and integrity in producing this work and am unaware of anyone who has not."** For electronic assignments, students can put it in the header and initial.

### **Our Classroom as Community:**

Treat all class members with professionalism and respect. Be fully present in class (i.e.):

- a. Turn off and put away all cell phones, beepers, and laptops when you enter the classroom. Volumes of research shows that student academic success is greater when they do NOT use laptops, etc. in classes, but use paper and pen/pencil instead to take notes. If disability accommodations include your use of a laptop, please obtain the required approval forms and let me know.
- b. **Bring printed out copies of readings or your writing when I specify you should do so.**
- c. Listen and participate when your peers lead the group
- d. Leave your other work outside our classroom. Do not aim to complete assignments for other classes. Engage in class discussion and activities.

### **Religious Observances:**

*Southwestern University recognizes that it has students from a variety of religious and cultural traditions that have special days of observance or celebration that may take students out of their regular activities on certain days during the school year. Since the academic calendar does not always coincide with these days, adhere to this policy to facilitate student absences due to cultural and religious observances.*

- *As far in advance as possible, the student is expected to notify the professor(s) or instructor(s) of the class(es) to be missed.*
- *The student is expected to learn what assignments or exams are due or will be assigned on those dates and negotiate with the professor(s) or instructor(s) alternate times for fulfilling those requirements. Students should be prepared to fulfill the requirements prior to the class(es) to be missed.*

### **Writing Center:**

An invaluable resource is the **Writing Center**; Writing Center staff are available to assist you in conceptualizing papers, in helping you create an outline, in reviewing drafts of your papers for the logic and coherence of your argument, the effectiveness of your evidence, etc... The Writing Center requires students to sign into an on-line system. You can do so here: [mywco.com/dewc](http://mywco.com/dewc). Check out [website](#), which includes online writing resources, including some new additions!

**Attendance:** Class attendance is mandatory. One unexcused absence does not count as a penalty (I realize life happens sometimes). However, any additional unexcused absences will result in the loss of

two percentage points for each absence from your final grade for the course. If you need to miss class or class-related activities/assignments for religious observance reasons, school-sponsored athletic events, or other potentially excusable reasons, you must let me know (email) prior to your absence. Attendance is also required at Biology seminars.

**Participation:** Your active engagement with class materials (readings, films) and in class activities (discussions, etc.) are critical to the success of this course. Participation will thus be a portion of your grade.

**Moodle:**

Southwestern uses an interactive course management system called Moodle. You will use Moodle to submit assignments, keep track of your grades, and download additional readings. Your username and password is your regular SU-electronic ID (same as your email). With any new technological application, sometimes things can go awry. Melanie Hoag ([hoagm@southwestern.edu](mailto:hoagm@southwestern.edu) or x1644) can be of assistance with any Moodle difficulty.

**Submitting Assignments:**

Moodle/Google Drive. I cannot open “.pages” documents on Moodle. Please make sure to always make your documents open-able by MS Word or Adobe PDF on a PC platform. Save them with .doc or .docx extensions, ideally. I may ask you to submit/share some assignments as Google Docs so that I can easily comment on them.

**Late Work:** 10% penalty per class day. One “Had a Bad Day” extension.

**After class:** I teach First Year Seminar directly after Capstone until November 1<sup>st</sup>. Therefore, we must end class on time and I will not be available for questions immediately after class. Please feel free to catch me in office hours, by appointment or other random times in my office. I teaching only Tuesday and Thursday mornings, have meetings 12 – 2 on Wednesdays but am otherwise reasonably flexible.

**Dogs:**

I tend to enjoy the faculty privilege of bringing my dogs, Twinkie and Cupcake, to class. If they bother you, please let me know – anonymous is fine if you like. They can always hang in my office. They are hypoallergenic and shouldn't cause any allergic issues. They bark on occasion but usually are not disruptive. Cupcake unfortunately does has Congestive Heart Failure. This causes her to cough (which is sad and a little disruptive) and requires her to take a number of medications. One of the side effects of the medications is an excessive thirst and the consequence that goes along with it. If she indicates the need to go outside during class, I will request a short break. And, of course, no chocolate for them.

**Food/Beverage in class:**

I do not mind if you consume small “snacks/breakfast” during class with the limit that your food or beverage must not make noticeable noise or attract attention (i.e. avoid potato chips, slurping straws, etc...). We will have three days of class where we have breakfast together.

**Facebook/Social Media Policy:**

All official class information goes through Moodle or myself to your SU email. Most students seem to have a Facebook or Instagram account. I'm happy to be "A Friend" with SU students with the knowledge that I am a faculty member at Southwestern first and take that seriously. If I see something that worries me, I will follow up. I believe in better safe than sorry. At the same time, I'm certainly not in the habit of checking up on students but cannot help but read updates when posted. My Profile page is all-

inclusive for my friends, family and some students. I do not post anything there that I am not willing to publicly share (this is good advice). So, if you would like to request to be my friend, I will certainly accept but I do not want to compel people. As another social media alternative, you can follow me on Twitter @ProfRomi. I originally started a Twitter account to keep up with the chocolate world and find it an excellent resource. You can also check out my own experiences at [www.profromi.com](http://www.profromi.com)

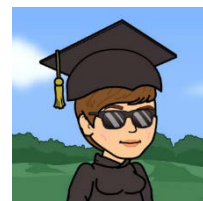
### Moodle Syllabus Statement:

After reading the syllabus, please mark important dates on calendars (exam, drop date, presentation) and COMPLETE THE SYLLABUS CHECK by typing in “I have read the syllabus and understand the expectations.” By entering this, I know that you understand:

1. The expectations for success in Biology Capstone are abundantly clear.
2. Students can make an appointment with Dr. Burks if times conflict.
3. All your questions about the syllabus have been answered.
4. Students will first consult syllabus and then clarify with Dr. Burks.

About PROFROMI – also see [www.profromi.com](http://www.profromi.com)

- Twitter @ProfRomi
- Current Biology Department Chair
- Aquatic molecular ecologist that studies large freshwater snails patterns of diversity/distribution
- Teaches about chocolate across many disciplines
- Part of Environmental Studies at SU
- Owned by two fuzzy “children” – Bichons Twinkie & Cupcake
- Excited for year 14 in the Department of Biology
- Lives in Georgetown, avid reader, loves sushi
- Very much available to answer student questions and help.



	<b>Topic &amp; Activities</b> <b>(Reading Assignments, Writing Assignments &amp; Other Announcements)</b>
Tuesday, August 28 <sup>th</sup>	<p><b>INTRODUCTION</b></p> <p><i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>What do I Want Out of Biology Capstone?</i></li> <li>• <i>Syllabus Review</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: COURCHAMP ET AL. 2017; LOCKWOOD CH. 1</i></p>
Thursday, August 30 <sup>th</sup>	<p><b>INVASION BIOLOGY 101</b></p> <p><i>HOW TO PREP FOR CLASS:</i> Do the above readings. Start thinking about the context of invasion.</p> <p><i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Develop Invasion Biology framework and language</i></li> <li>• <i>Brainstorm “invasion” examples</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: READ GLASHEEN 2015 LITERATURE REVIEW</i></p>
Tuesday, September 4 <sup>th</sup>	<p><b>WHAT’S A LITERATURE REVIEW - SMITH LIBRARY</b></p> <p><i>HOW TO PREP FOR CLASS:</i> Read student example of literature review</p> <p><i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Critique literature review</i></li> <li>• <i>Review strategies for searching for primary literature</i></li> </ul> <p><i>ANNOUNCEMENTS: BIOLOGY FRESH SEMINAR – BURKS – FRIDAY 9/7 AT NOON</i></p> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: THINK ABOUT ‘INVASION’ IN BIOLOGY</i></p>

**CLASS IN SLC  
SANDBOX**



<p>Thursday, September 6<sup>th</sup></p> <p><b>CLASS IN SLC SANDBOX</b></p>	<p><b>CONCEPT MAPPING/QUESTION DEVELOPMENT</b>  <i>HOW TO PREP FOR CLASS:</i> Bring examples of “invasion” that might have been covered in other courses and be ready to describe  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss invasion across biology</i></li> <li>• <i>Sign up for Primary Literature Days</i></li> <li>• <i>Sign up for ETS MFT Activity Days</i></li> <li>• <i>Sign up for Breakfast Days (Biology pays; students arrange)</i></li> </ul> <p><i>ANNOUNCEMENTS: BIOLOGY FRESH SEMINAR – BURKS – FRIDAY 9/7 AT NOON</i>  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: TBD</i></p>
<p>Tuesday, September 11<sup>th</sup></p> <p><b>INVASION AREA OF INTEREST DUE</b></p>	<p><b>INVASION DISCUSSION</b>  <i>HOW TO PREP FOR CLASS:</i> Have an area of interest in regards to invasion and explain how your system fits an invasion biology framework or where modifications might be needed  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss areas of interest</i></li> <li>• <i>Search for primary literature</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE</i></p>
<p>Thursday, September 13<sup>th</sup></p> <p><b>PL 1 Paper Choice Due</b></p> <p><b>CLASS IN SLC SANDBOX</b></p>	<p><b>LIBRARY RESEARCH DAY – “FREE TIME” – NARROW DOWN QUESTION</b>  <i>HOW TO PREP FOR CLASS:</i> Read feedback from Dr. Burks about question and consider comments from class discussion on where you might investigate further  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Spend time examining resources in the library</i></li> </ul> <p><i>ANNOUNCEMENTS: BIOLOGY SOCIAL 4 - 5</i>  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: TBD</i></p>
<p>Tuesday, September 18<sup>th</sup></p> <p><b>FOCUSED QUESTION DUE</b></p> <p><b>PL 2 &amp; 3 Paper Choices Due</b></p>	<p><b>CHARACTERISTICS OF GOOD WRITING MFT ACTIVITY 1</b>  <i>HOW TO PREP FOR CLASS:</i> Come with focused question  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Topic sentences exercise for Introduction/Background</i></li> <li>• <i>Major Field Test Activity 1</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: READ PL 1 FOR CLASS DISCUSSION ON THURSDAY</i></p>
<p>Thursday, September 20<sup>th</sup></p> <p><b>BREAKFAST DAY</b></p>	<p><b>PRIMARY LITERATURE PRESENTATION 1</b>  <i>HOW TO PREP FOR CLASS:</i> Read the primary literature paper and prepare 2-3 quality questions about its content  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Primary Literature Presentations</i></li> <li>• <i>Class time to work on Research Proposals</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: READ 2 PRIMARY LITERATURE PAPERS FOR TUESDAY.</i></p>
<p>Tuesday, September 25<sup>th</sup></p> <p><b>PL 4 &amp; 5 Paper Choices Due</b></p>	<p><b>PRIMARY LITERATURE PRESENTATION 2 AND 3</b>  <i>HOW TO PREP FOR CLASS:</i> Read the primary literature papers and prepare 2-3 quality questions about their content  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Primary Literature Presentations</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE – WORK ON PROPOSAL</i></p>
<p>Thursday, September 27<sup>th</sup></p> <p><b>RESEARCH PROPOSAL DUE</b></p>	<p><b>RESEARCH PROPOSAL DISCUSSION</b>  <i>HOW TO PREP FOR CLASS:</i> Complete research proposal. Bring one PowerPoint/Google Slide to explain your idea and approach  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Slide share and critique</i></li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: READ 2 PRIMARY LITERATURE PAPERS FOR TUESDAY.</i></p>

Tuesday, October 2 <sup>nd</sup>	<b>PRIMARY LITERATURE PRESENTATION 4 AND 5</b> <i>HOW TO PREP FOR CLASS:</i> Read the primary literature papers and prepare 2-3 quality questions about their content <i>CLASS ACTIVITIES/PLAN:</i> <ul style="list-style-type: none"> <li>• Primary Literature Presentations</li> </ul> <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> COMPLETE ANNOTATED BIBLIOGRAPHY
Thursday, October 4 <sup>th</sup>  <b>ANNOTATED BIBLIOGRAPHY DUE</b>  <b>BREAKFAST DAY</b>	<b>MFT ACTIVITY 2</b> <i>HOW TO PREP FOR CLASS:</i> Complete bibliography <i>CLASS ACTIVITIES/PLAN:</i> <ul style="list-style-type: none"> <li>• MFT Activity</li> <li>• Time in class to work on outline</li> </ul> <i>ANNOUNCEMENTS:</i> NO CLASS NEXT TUESDAY – FALL BREAK! <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> NONE
Tuesday, October 9 <sup>th</sup>	<b>FALL BREAK – NO CLASS</b>
Thursday, October 11 <sup>th</sup>  <b>PL 5 &amp; 6 Paper Choices Due</b>	<b>COLLEGIATE LEARNING ASSESSMENT EXAM – SMITH LIBRARY 202/204</b> <i>HOW TO PREP FOR CLASS:</i> Submit outline on Moodle. Show up to computer lab early/on time. <i>ANNOUNCEMENTS:</i> BURKS IN BOSTON <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> WORK ON OUTLINE.
Tuesday, October 16 <sup>th</sup>  <b>OUTLINE DUE</b>  <b>PL 7 &amp; 8 Paper Choices Due</b>	<b>PEER REVIEW OF FIRST DRAFT/OUTLINE</b> <b>MFT ACTIVITY 3</b> <i>CLASS ACTIVITIES/PLAN:</i> <ul style="list-style-type: none"> <li>• Peer Review</li> <li>• MFT Activity</li> </ul> <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> READ 2 PRIMARY LITERATURE PAPERS FOR THURSDAY AND COMPLETE PEER REVIEWS.
Thursday, October 18 <sup>th</sup>  <b>PEER REVIEWS DUE</b>	<b>PRIMARY LITERATURE PRESENTATION 5 &amp; 6</b> <i>HOW TO PREP FOR CLASS:</i> Read the primary literature paper and prepare 2-3 quality questions about its content <i>CLASS ACTIVITIES/PLAN:</i> <ul style="list-style-type: none"> <li>• Primary Literature Presentations</li> </ul> <i>ANNOUNCEMENTS:</i> FRESH BIOLOGY SEMINAR ERIKA BORDEN – FRIDAY 10/19 <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> READ 2 PRIMARY LITERATURE PAPERS FOR TUESDAY.
Tuesday, October 23 <sup>rd</sup>	<b>PRIMARY LITERATURE PRESENTATION 7 &amp; 8</b> <i>HOW TO PREP FOR CLASS:</i> Read the primary literature paper and prepare 2-3 quality questions about its content <i>CLASS ACTIVITIES/PLAN:</i> <ul style="list-style-type: none"> <li>• Primary Literature Presentations</li> </ul> <i>ANNOUNCEMENTS:</i> BIOLOGY SOCIAL TEA – WEDNESDAY 10/24; 4:30 – 5:30 PM <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> NONE
Thursday, October 25 <sup>th</sup>	<b>PRESENTATION 101 PLUS IN CLASS FREE WRITING TIME</b> <i>HOW TO PREP FOR CLASS:</i> Bring peer reviews and comments from Dr. Burks to class <i>CLASS ACTIVITIES/PLAN:</i> <ul style="list-style-type: none"> <li>• Quality presentation discussion</li> </ul> <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i> COMPLETE DRAFT OF LITERATURE REVIEW

<p>Tuesday, October 30<sup>th</sup></p> <p><b>FULL DRAFT DUE</b></p>	<p><b>MORE PEER REVIEW</b>  <i>HOW TO PREP FOR CLASS:</i> Be prepared to go over the Results of your study. Bring 2 PowerPoint/Google Slides to explain your data collection and analysis.  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• Peer Review</li> <li>• Research Presentations/Critiques</li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: COMPLETE 1<sup>ST</sup> REFLECTION</i></p>
<p>Thursday, November 1<sup>st</sup></p> <p><b>BIOLOGY REFLECTION DUE</b></p> <p><b>BREAKFAST DAY</b></p>	<p><b>BIOLOGY MAJOR DAY MFT ACTIVITY 4</b>  <i>HOW TO PREP FOR CLASS:</i> Complete reflection  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• Discuss life as a biologist</li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: COMPLETE RESPONSE TO PEER REVIEW</i></p>
<p>Tuesday, November 6<sup>th</sup></p> <p><b>RESPONSE TO PEER REVIEW DUE</b></p>	<p><b>FREE DAY</b>  <i>HOW TO PREP FOR CLASS:</i> Complete revisions and separate “response” to peer reviews  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• XX</li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE</i></p>
<p>Thursday, November 8<sup>th</sup></p>	<p><b>MAJOR FIELD EXAM – PART I – SMITH LIBRARY CENTER 202/204</b>  <i>HOW TO PREP FOR CLASS:</i> Before - Spend 1 hour/week reviewing general biology concepts. Get a good night’s sleep. Eat breakfast. Be on time.  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE</i></p>
<p>Tuesday, November 13<sup>th</sup></p>	<p><b>MAJOR FIELD EXAM – PART II – SMITH LIBRARY CENTER 202/204</b>  <i>HOW TO PREP FOR CLASS:</i> Before - Spend 1 hour/week reviewing general biology concepts. Get a good night’s sleep. Eat breakfast. Be on time.  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE</i></p>
<p>Thursday, November 15<sup>th</sup></p>	<p><b>WORK ON SLIDES</b>  <i>HOW TO PREP FOR CLASS:</i> Come prepared to put together presentation.  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• Working time</li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i></p>
<p>Tuesday, November 20<sup>th</sup></p> <p><b>FINAL PAPER DUE</b></p> <p><b>BREAKFAST DAY</b></p>	<p><b>PRACTICE TALKS – START AT 8:00</b>  <i>HOW TO PREP FOR CLASS:</i> Finish draft slides  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• Practice presentations – PEER REVIEW OF SLIDES</li> </ul> <p><i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE</i></p>
<p>Thursday, November 22<sup>nd</sup></p>	<p><b>NO CLASS – THANKSGIVING</b>  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: NONE</i></p>

<p>Tuesday, November 27<sup>th</sup></p> <p><b>RESEARCH TALKS</b></p>	<p><b>CAPSTONE PRESENTATIONS 1 - 4</b>  <i>HOW TO PREP FOR CLASS:</i> Complete presentations.  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Formal research presentations</i></li> </ul> <p><i>ANNOUNCEMENTS: FRESH BIOLOGY SEMINAR MARIA CUEVAS – FRIDAY 11/30</i>  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS:</i></p>
<p>Thursday, November 29<sup>nd</sup></p> <p><b>RESEARCH TALKS</b></p>	<p><b>CAPSTONE PRESENTATIONS 1 - 4</b>  <i>HOW TO PREP FOR CLASS:</i> Complete presentations.  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Formal research presentations</i></li> </ul> <p><i>ANNOUNCEMENTS: FRESH BIOLOGY SEMINAR MARIA CUEVAS – FRIDAY 11/30</i>  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: COMPLETE PAIDEIA REFLECTION</i></p>
<p>Tuesday, December 4<sup>th</sup></p> <p><b>PAIDEIA REFLECTION DUE</b></p>	<p><b>PRACTICE INSPIRE TALKS</b>  <b>PAIDEIA CONNECTIONS</b>  <i>HOW TO PREP FOR CLASS:</i> Complete presentations.  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Formal research presentations</i></li> <li>• <i>Paideia Discussion</i></li> </ul> <p><i>ANNOUNCEMENTS: CAPSTONE INSPIRE TALKS ON FRIDAY</i>  <i>READINGS FOR NEXT CLASS AND OTHER ASSIGNMENTS: COMPLETE LAST REFLECTION</i></p>
<p>Thursday, December 6<sup>th</sup></p> <p><b>BIOLOGY SEMINAR REFLECTION DUE &amp; SELF EVAL</b></p> <p><b>BREAKFAST DAY</b></p>	<p><b>LAST DAY CLASS WRAP-UP</b>  <i>HOW TO PREP FOR CLASS:</i> Come ready for assessment  <i>CLASS ACTIVITIES/PLAN:</i></p> <ul style="list-style-type: none"> <li>• <i>Course evaluations</i></li> <li>• <i>Biology Exit Survey</i></li> <li>• <i>Self Evaluations</i></li> <li>• <i>Seminar Discussion</i></li> </ul> <p><i>ANNOUNCEMENTS: CAPSTONE INSPIRE TALKS ON FRIDAY</i></p>
<p>Friday, December 7<sup>th</sup> 12:00 PM</p> <p><b>INSPIRE TALKS AND LUNCH RECEPTION</b></p>	<p><b>CAPSTONE PRESENTATIONS – INSPIRE TALKS</b></p>