

## GENERAL ZOOLOGY (BIOLOGY 120) COURSE SYLLABUS

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Instructor: Dr. Tupper

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Website: <http://blogs.nvcc.edu/ttupper/>

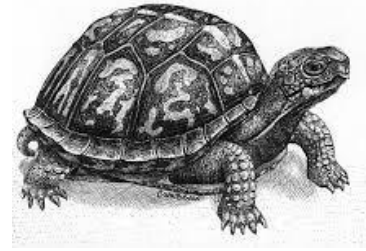
Facebook: <https://www.facebook.com/nvcczoology/>

Office hours: By appointment

Lecture Section: 050N (CS 131)

Lab Section: 0CON (CS 114)

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**Course description and general purpose:** Presents basic biological principles, emphasizes structure, physiology, and evolutionary relationships of invertebrates and vertebrates. This is a four-credit, one-semester course for science majors, or nonmajors. In it, students are introduced to the evolution of animals from the Paleozoic to the present. Emphasis is placed on evolutionary relationships, anatomical and physiological characteristics of major phyla, and how they fit into their respective environments. This course, coupled with botany, satisfies the biodiversity requirement (plus 4 biology elective credits) for biology majors at George Mason University.

**Textbook:** Miller SA, Tupper TA. 2024. Zoology, 12th Edition. McGraw Hill. Because the 12th edition is substantially different from the prior editions, it is what we use. This can be acquired at [the NVCC Annandale Campus bookstore](#).

**Field guide (optional):** Alden P, Cassie B. 1999. [National Audubon Society Field Guide to the Mid-Atlantic](#), 1<sup>st</sup> Edition. Knopf. 0-679-44682-6. Available in the NVCC Annandale bookstore. You can purchase directly from the Audubon society too. Also, you can use alternate sources or field guides to learn the animals. Normally I have a lot of these to lend out to people taking my classes. However, because covid hit, many of the copies that I lent out never made it back to campus. I have a few left. Please be sure to return these at the end of the semester so that others who may be financially constrained can use them.

**Competencies:** The student should be able to read and express themselves both orally and in writing on a college freshman level as measured by a college English competency examination (ENG 111 or permission of instructor).

**Field trips:** We have a few local field trips. I think you should see animals in their natural habitat in addition to preserved specimens. Please wear appropriate attire. This includes long sleeves, long pants, and hiking boots. If you have long hair, put it up, and under a hat. Lastly, please read about [chiggers](#), [poison ivy](#), [west Nile virus](#), and [tick-borne diseases](#). Bring a snack, water, sunscreen, and some hand sanitizer. The trip dates are posted below, and they are dependent on the weather. Bring the Assumption of Risk and Code of Conduct forms, signed. The field trips will be confirmed by email on the morning of the trip. We have a day-long field trip to the [Smithsonian Environmental Research Center](#). This is an extra credit assignment and is worth 50 points. It's extra credit because it's on a Saturday or Sunday. This field trip is led by me, and a highly accomplished Smithsonian biologist, Robert Aguilar.

**Evaluation:** Your final grade will be based on 4 lecture exams, lecture attendance, assignments, lab attendance and activities, and field trip participation. Lecture exams consist of multiple choice, short answer questions and/or essay questions. Your final grade = points received/points possible x 100. There are no make-up exams, and no exam grades are dropped. All lecture exams are timed, open notes, and are to be taken at home via canvas (except the final). Lockdown browser and monitor are required. You will have a one-week window to take three lecture exams. The final is on campus. Notes must be handwritten hard copies (unless you have accommodations). Late assignments, including exams, are not accepted.

**Student needs:** Students who may require accommodations are encouraged to contact the [college center for accommodations and accessibility services](#). If you have a memorandum of accommodation, please present that to me via email (or a hard copy). We can then discuss how I can best help you. [NOVA can help with food, bills, rent, childcare, and mental health needs](#). If you need other financial advice, please click [here](#). If you need a Sign Language interpreter or CART Captioning, contact Interpreter Services at: [interpreters@nvcc.edu](mailto:interpreters@nvcc.edu). If you need academic assistance or need college

services but cannot make it to campus, please review NOVA's [remote student support services](#) to receive virtual assistance. Click on the following hyperlink if you are in the [military or are a veteran](#) and need assistance. If international students have specific questions, [click here](#). Complaints of sex-based discrimination, sexual violence, domestic violence, dating violence, and sexual or gender-based harassment can be [reported here](#). If you feel unsafe on campus, please click [here](#) or [here](#).

**Academic honesty and conduct:** At Northern Virginia Community College, we expect the highest standards of academic honesty. Academic dishonesty is prohibited in accordance with the Student Conduct, Rights and Responsibilities described in the [student handbook](#). NVCC's [policy](#) prohibits cheating on examinations, unauthorized access to examinations or course materials, plagiarism, and other proscribed activities. Students that violate plagiarism and academic honesty codes will be [reported](#). If a student behaves in a hostile or disruptive manner or presents any indication that they are a harm to themselves or others, a formal request for assistance to the [office of wellness and mental health](#) will be submitted, and the police may be contacted. Regarding covid/influenza/RSV: if you are feeling sick, please do not come to class. I will be unmasked while lecturing so that students can hear me. If I get sick and am out for an extended period, that will be problematic for all of us.

**Cancellation dates:** In the event of class [cancellation](#), we will resume where we left off during the next meeting. For example, if we were to have an exam scheduled on September 1<sup>st</sup>, and there was a nationwide internet blackout, the exam would take place on our next scheduled meeting on September 7<sup>th</sup>. It would be best if you were ready to transition to that format in case of emergency. If the entire class is okay with it, exams will be remote and asynchronous. You will need access to a computer with a webcam, and you will need to download [respondus lockdown](#). [Please click here for emergency alerts](#).

**Important dates, audit policy and incompletes:** For critical dates regarding refunds, withdraw, holidays, etc., click [here](#). Auditing this course requires instructor permission. Incompletes are only granted if the student's circumstances are dire (e.g., health issues, family issues, documented work conflict) and if [certain criteria](#) are met. Incompletes must be approved by the division dean and provost. Health claims must be documented by medical professionals. Final exam times are different than your normal class meeting time. They are posted below.

**Comments on submitting written work:** I will not be assigning research papers this semester. The field trip report, however, is written. You can ask the [writing center staff](#) for help with the report, and for other classes.

**Email policy and canvas discussions:** Please use proper English when composing emails and posting discussions. Please keep writing somewhat formal, free of slang, and as grammatically correct as possible. Please address me in the emails as Dr. or Professor Tupper. It is okay to call me by my first name if you are no longer taking courses with me. I will reply to your emails within 24-48 business hours from its sent time. There are times when I miss an email, or it gets sent to my junkbox. If you do not hear from me within 48 business hours, please just email me again. Due to the volume of emails that I receive, I may not reply to you unless you ask me a specific question. Here are some course email guidelines:

1. Email me if you have questions about the course content or if you want to set up a time to meet and discuss some of the course content. I am more than happy to help you learn the material.
2. Email me if there are serious circumstances that are beyond your control that may need my attention (i.e., health or job-related issues or conflicts that may result in a prolonged absence from class). Smaller and less serious questions can be answered by emailing a classmate, or by using canvas discussions.
3. You don't have to email me if you are going to be late to class. (But to avoid disruptions, the door will be locked 10 minutes after the class begins.)
4. You don't have to email me if you are going to miss a single class, or if you have missed a single class.
5. Please first ask your classmates or use canvas discussions to find out about any logistics/instructions that I have explained in a previous class that you did not attend. Then email me if there still is a concern.
6. Please do not email me asking for extensions on labs and other assignments.
7. Please do not email me asking for more extra credit.
8. Please email me from your official vccs email account so it does not go to spam.

**General comments on success in this course:** Doing well in this course requires commitment and attendance. This course covers evolutionary biology, animal systematics, taxonomy, natural history, anatomy, and physiology. By nature, these topics can be challenging. You need to set aside time for reviewing lecture notes, reading, and studying after and before every lecture. Please make use of canvas discussions and become friendly with other students in the class. It helps calm anxieties about the course if you have some peer support. Please be on time for class. Lectures are not recorded. Recording devices will only be permitted for students who present a memorandum of accommodation.

You're probably going to feel overwhelmed after the first lecture. Please know that this is normal and that you'll be fine once you get used to my teaching style. When I lecture, I tend to like to talk to people taking my classes rather than *at* them. I like interactive courses. Consequently, I tend to ask people a lot of questions. I do this because when people taking my class explain concepts (rather than just me), it can be quite helpful for learning. There's no penalty for getting a question wrong, and again, once you get used to my lecture style, you will see that we are in a judgement free zone where everyone is welcome to participate. That said, if you have serious social anxiety and would prefer not to be called on, just let me know. I understand.

**eMind login information:**

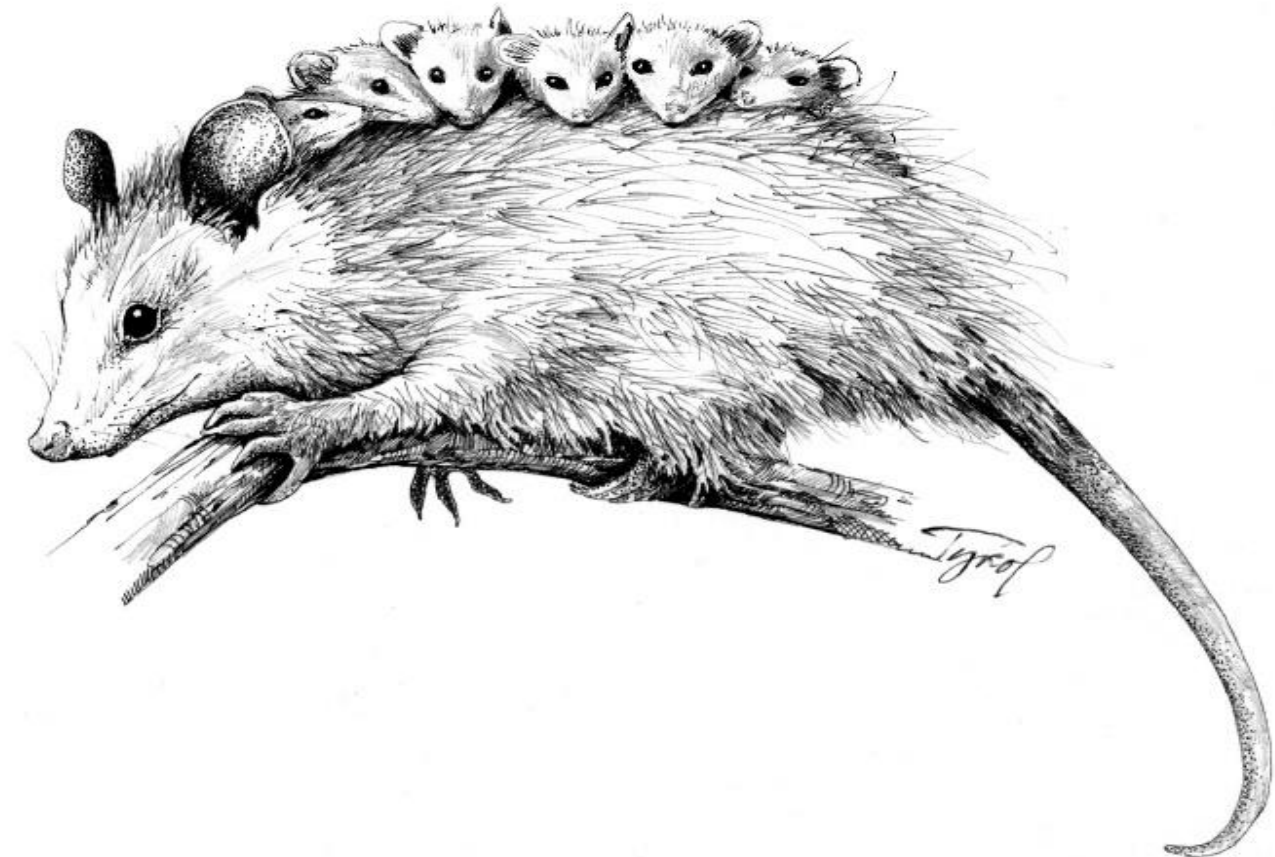
To create eMind account, go to: <https://www.emindweb.com/enroll.php>



Class Name: Zoology Summer 24

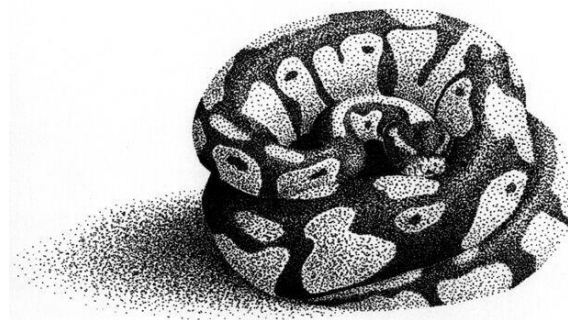
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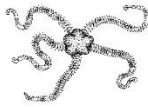

Reference Code: 5548422907810

To receive credit for your eMind assignments you must submit a screen capture of your quiz scores (as soon as the quiz is completed a notification with your score on it will pop up. Capture it, submit as a jpeg only). You also must submit the associated worksheets. There is no partial credit on the worksheets. All answers must be correct and complete.



Tentative Lecture Schedule (This is super condensed and may change!)			
Lecture Unit	Lecture Topic	Chapters and Notes	Date
1. Introductory material, animal organization, origins, basal phyla	Course intro, origins, and the basal phyla	Read chapters 1 and 9. Take note of figure 1.4. Know the answers to the end of chapter questions. Know end of chapter summaries (for all chapters).	May 20 <sup>th</sup> (10 pts) Syllabus quiz due @ 11:59pm 
Take home Exam 1 (150 pts)			
2. Protostomia 1: Spiralia	Platyhelminthes and selected lesser-known phyla	Chapter 10	May 22 <sup>nd</sup> (10 pts) <a href="#">eMind Classification &amp; Evolution due @ 11:59pm (20 pts)</a>
	Molluscs, annelids, and selected gnathiferans	Chapters 11 & 12	May 29 <sup>th</sup> (10 pts)
Take home Exam 2 (150 pts)			
3. Protostomia 2: Ecdysozoa	Cycloneuralia	Chapter 13	June 3 <sup>rd</sup> (10 pts)
	Panarthropoda 1: Chelicerata	Chapter 14	
	Panarthropoda 2: Mandibulata	Chapter 15	June 5 <sup>th</sup> (10 pts)
Take home Exam 3 (150 pts)			
4. Deuterostomia	Ambulacraria, intro to the chordates, and fishes	Chapters 16 & 17	June 10 <sup>th</sup> (10 pts)
	Amphibians and reptiles	Chapter 19 & 20	June 12 <sup>th</sup> (10 pts)
	Birds and mammals	Chapter 21 & 22	June 17 <sup>th</sup> (10 pts)
5.	Ecological principles and environmental problems (time permitting)	Chapter 6	June 24 <sup>th</sup> (10 pts) <a href="#">eMind Ecology due 11:59 pm (10 points)</a>
6.	Essential catch up and exam prep		June 26 <sup>th</sup> (10 pts)
Exam 4 (200 pts) In person, still using canvas. Laptops/tablets required.			
			July 1 <sup>st</sup> @ 11:10 am. <a href="#">Rise of the animals quizzes due by then as well (20 pts).</a>



Tentative Lab Schedule			
Lab Week	Content	Date	Points
1	<a href="#">Dora Kelly Nature Preserve*</a>	May 21 <sup>st</sup>	20
2	Porifera and Cnidaria	May 23 <sup>rd</sup>	10
3	Platyhelminthes	May 28 <sup>th</sup>	10
4	Mollusca	May 30 <sup>th</sup>	10
5	<a href="#">Huntley Meadows*</a>	June 4 <sup>th</sup>	20
6	Ecdysozoa	June 6 <sup>th</sup>	10
7	 Echinodermata	June 11 <sup>th</sup>	10; <a href="#">eMind Invertebrates due @ 11:59pm (10 pts)</a>
8	Fishes	June 13 <sup>th</sup>	10
9	<a href="#">Hidden Pond*</a>	June 18 <sup>th</sup>	20
10	Rainforest Assignment and Field ID Quiz. In person. Scantron required.	June 25 <sup>th</sup>	<a href="#">Rainforest assignment</a> = 10 pts; Field ID quiz 70 pts total
11	 Vertebrate Comparative Anatomy (time permitting)	June 27 <sup>th</sup>	10; <a href="#">eMind Vertebrates due @ 11:59p (10 pts)</a>
Extra Credit	<a href="#">SERC*</a>	May 25 <sup>th</sup> (rain date is the 26 <sup>th</sup> )	50 (Extra Credit)



Breakdown of Points in the Course (Not Including Extra Credit)			
Item	Quantity	Points	Total
<b>Lecture</b>			
Lecture attendance	10	10	100
Lecture Exams	4	150 & 200	650
eMind classification	1	10	10
eMind evolution	1	10	10
eMind ecology	1	10	10
Rise of animals 1	2	10	20
Rise of animals 2	1	10	10
Syllabus quiz	1	10	10
<b>Lab</b>			
Field ID quiz	1	70	70
Field trips	3	20	60
eMind inverts	1	10	10
eMind verts	1	10	10
On-campus labs	7	10	70
<b>Total points possible</b>			<b>1040</b>

\* Field trips are weather dependent. This course is very condensed, and we may deviate from this schedule. The SERC field trip is extra credit.