

General Biology: diversity; physiology; ecology
BIOL. 119 (02), CRN# 54962 MWF 12:30-1:20,
Course Syllabus: Spring, 2020 (01/18/20)

COURSE DESCRIPTION:

An introductory course in the biological sciences covering animal diversity, animal biology, plant biology, and ecology. Biol 119 Counts for general education only when taken with BIOL 116. This course has a prerequisite of BIOL 117 and is intended for science majors and other well-prepared students.

COURSE INSTRUCTORS:

Dr. Robert Feissner (Office: ISC 356, Phone: 245-5022, e-mail: feissner@geneseo.edu)

Office hours: Tuesday and Thursday, 10:30-12:00, and by appointment.

Dr. Jacob McCartney (Office: ISC 139C, Phone: 245-6050, e-mail: mccartneyj@geneseo.edu)

Office hours: Monday, 1:30-3:00, Wednesday, 10:30-11:30, Thursday, 2:00-3:00, and by appointment.

COURSE GOALS:

This course has two main objectives; the first is to increase your biological knowledge and prepare a firm foundation of knowledge for the courses that follow and the second is to help you develop the intellectual skills needed for advanced study of biology: to develop the ability to organize information from various disciplines, to fit it into a conceptual framework, to use it in the synthesis of new ideas and to understand how biologists think and approach scientific questions.

LEARNING OUTCOMES FOR BIOL. 119:

Upon completion of this course, students will be able to:

- Describe the diversity and unity of organisms: identifying characteristics that unify major taxa; and recognize the relationships among major taxa.
- Understand the basic form and function of the major groups of organisms and how this structure continuously evolves
- Describe the mechanisms by which organisms interact with their environment in ways that perpetuate life processes.
- Use models to explain complex biological phenomena.
- Apply knowledge of biological systems to solve novel problems in and outside of class.
- Demonstrate adjustment to college expectations through successful completion of course requirements including online tutorials, homework, reading quizzes and chapter review quizzes with increasing independence through the semester.

TEXTBOOK AND MATERIALS:

Textbooks and MasteringBiology codes purchased for use in Biol 117 in the Fall 2019 semester are still valid and usable (i.e. you will not need to purchase anything new for this semester).

Textbook: Absolutely required for this course are the eText of Biological Science (**Sixth Edition**) by Freeman et al., Pearson Cummings Publisher and the modified MasteringBiology website access code. This code will have to be entered via the Canvas website for this course. Through the SUNY Geneseo bookstore you have three options for purchasing this text:

[1. BIOLOGICAL SCIENCE LL-WMOD.MASTERING | Edition: 6TH 17](#)

Loose-leaf text w/ModifiedMasteringBiology & etext Access Card Package

Author: FREEMAN

Biol. 119/Jan. 09, 2020

ISBN: 9780134528076

Estimated Student Price new: \$203.20

[2. BIOLOGICAL SCIENCE-MOD.MASTERINGBIOL. | Edition: 6TH 17](#)

ModifiedMasteringBiology & etext Access Card

Author: FREEMAN

ISBN: 9780134294780

Estimated Student Price new: \$146.65

[3. BIOLOGICAL SCIENCE-WMODIFIED ACCESS | Edition: 6TH 17](#)

Hard copy text w/ModifiedMasteringBiology & etext Access Card package

Author: FREEMAN

ISBN: 9780134577821

Estimated Student Price new: \$280.00

Purchasing the Modified MasteringBiology is essential as you will have graded tutorials and quizzes to complete there. Modified MasteringBiology also provides many other helpful supplements such as practice tests. The ModifiedMasteringBiology standalone that you can purchase through the bookstore includes the eText. Please note that ***you must have the 6th edition of the MasteringBiology access code.*** If you purchase the ModifiedMasteringBiology for an earlier edition, you will not be able to complete quizzes or tutorials. We will not provide support for using the 5th edition of the textbook.

A two week trial subscription to modified mastering biology is available. If you must wait to purchase your MasteringBiology access code, you can still register using the temporary subscription. However, at the end of two weeks, you must put in an access code or risk losing all work done up to that point.

Course materials: Other course materials will be available within the Canvas System

<https://canvas.geneseo.edu/courses/15745>. Self-help guides are available through the Canvas system website as well, <https://wiki.geneseo.edu/display/cit/Canvas+Self+Help+Documents>

Top Hat access: We will be using a program called Top Hat to record your participation during lectures. You will have to register for this access but it is free to you. You should have received an invitation to join the class called **Biol 119-02 Spring 2020**. The join code is **401053**. In most cases your G number will already be in the roster as well as your student ID. If it is not, then we ask that you enter your G This number starts with G00 (two zeroes). You can then log into Tophat during class to answer questions. Please keep an eye out for the emailed invitation. If you haven't received it please email Dr. Feissner or Dr. McCartney stating this.

EVALUATION	
Graded work:	Contribution:
Exams (4 in class, one final, of which 4 will count)	80%
Day-to-Day activities (including reading quizzes and online homework)	20%

EVALUATION (ADDITIONAL INFORMATION)
Overview: One-fifth of your grade will come from low-stakes quizzes, homework and participation measures. These are designed to incentivize you to keep up with assigned readings, attend class, and review outside of class. These quizzes, homeworks and participation measures are not optional, and you must complete the day-to-day activities in order to earn a grade higher than a C+.

Reading quizzes: There will be short online quizzes consisting mostly of multiple choice and other objective questions covering each of the assigned chapters in the textbook. The role of the reading quizzes is to ensure that everyone has a common foundation of basic knowledge for the activities in class. Reading quizzes emphasize basic terminology and major concepts allowing us to use class time for active learning and for the more challenging topics that will better prepare you to take the exams.

Quizzes are found within the MasteringBiology supplement, and linked through Canvas. You must complete each online quiz by yourself, within a narrow window of time (a little over 24 hours), prior to the class in which the chapter will be discussed. **Reading quizzes open at least 48 hours before their respective due dates and close at 11:59 pm the day before the scheduled lecture.** Quizzes are set up with a short time limit and a subset of possible questions will be delivered in random order. Because reading quizzes are intended to be a self-assessment, they will be graded as an all-or-nothing assignment in which any passing grade (60% or greater) will receive full credit and a failing grade (<60%) will receive no credit. Although deadlines are set in advance, the schedule MAY change, so watch your email and listen for announcements in class. Completion of every reading quiz during each quarter will earn a 10% bonus for the quarter's quiz grade. No bonus will be awarded if even one quiz is missed.

Tutorials: Tutorials are designed to promote good study habits and give opportunities to practice skills needed for the tests and are also completed through the ModifiedMastering system. Tutorials are intended to take approximately one hour of your time, and each tutorial will contribute the same amount toward your final grade. Tutorials offer hints and allow multiple tries, but you will receive more credit if you don't use these. **Tutorials are not timed, and are open for approximately three weeks.** Leaving tutorials until the last minute is a bad idea because you may not have time to complete them. **They are due two business days before a test, with a late penalty of 33% per day after the due date.** If you complete the tutorials, you can rework the tutorials for practice after the due dates. Tutorials will reopen for review after the initial due date but only if you have completed them first. In addition, if **you complete** all of the tutorials in a quarter, you will receive a small bonus.

Adaptive follow up: Quizzes may be linked to an adaptive follow-up. These are additional questions related to any questions for which you have given an incorrect answer. **They carry no additional credit and do not affect your grade,** even if you do not complete them. Instead their role is to provide targeted extra practice tailored to your particular needs.

Participation: Active engagement in the classroom enhances learning and retention of **class** material, and research shows that attendance is strongly correlated with grades in introductory biology courses. Some days we will use survey technology in class to record answers to questions posed in class. The TopHat software that we use will allow you to respond with your laptop, tablet or phone. You will get credit even if your answers are wrong, although you will need to answer at least half of the questions posed in class to receive credit. If you encounter problems with TopHat, you can record your answers on paper and submit them at the end of class on the same day.

Practice tests and dynamic studying modules: In the MasteringBiology, there are many additional opportunities for practice, including the dynamic studying modules and practice tests for each chapter. These will not be graded, but will help you assess how well you have learned the subject matter for the tests.

Quarterly Exams: There will be four exams, each covering roughly one-quarter of the course and consisting of multiple-choice questions, given during class time. The four quarterly exams account for 80% of your final grade (20% each). Although there is no comprehensive exam in this class, the material is naturally cumulative, and you will not succeed in learning later topics if you have not mastered earlier topics. For example, understanding ecological biology in the fourth quarter depends on having a good foundation of animal and plant biology learned in the second and third quarters. The schedule of topics may be subject to change, but the exam dates are fixed. Content coverage on the exams will be adjusted if necessary.

Final Exam: This course will not have a comprehensive final exam, but instead will have the option of replacing ONE earlier exam score. Exams from all four quarters will be offered during the final exam time, but you will have the opportunity to replace only your lowest score. During the last week of class you will be able to select which exam you wish to retake. The higher of the two grades will be used for final grade calculations. For example, if you choose to retake exam #3 for which you scored 65% during the semester, you will use the final exam period to take a new exam on the material tested in quarter 3. If you receive a grade of 85%, then that will replace your exam #3 grade.

MONITORING YOUR PROGRESS

Grades: You will be able to track your performance through the semester using the MyCourses and MasteringBiology gradebooks. Use the MasteringBiology gradebook to monitor your progress with the quizzes and tutorials. The lowest score will be dropped for quizzes, tutorials and participation, and there is a small bonus for completing all of the quizzes and tutorials. See the policy section for information about missing quizzes, tutorials and participation. The gradebook in MyCourses can be used to track your progress toward your overall grade each quarter. Use the Reports tab in MyCourses to get a detailed look at your progress to date. Grades will follow the following point distribution, usually without adjustment or "curve."

≥93% = A	90-92.9% = A-	87-89.0% = B+	83-86.9% = B	80-82.9% = B-
77-79.9% = C+	73-76.9% = C	70-72.9% = C-	60-69.9% = D	<60% = E.

*Note that there are no extra credit assignments or other methods of adjusting the final grade for any reason.

COURSE ASSISTANCE: There are many ways of obtaining help in Biology 119, but all involve your taking the first step. Here are your options:

- **OFFICE HOURS:** Both professors have regularly scheduled office hours in order to provide assistance one-on-one or to small groups of students. We welcome the opportunity to provide assistance outside of class. Please direct your questions about course content to the instructor who has lectured on the particular topic, and direct questions about general course issues such as making up exams to the instructor who is not lecturing at the moment.
- **TUTORING:** Tutors will provide supportive activities and extra help several times a week. Additional information will be provided during the first week of class.
- **SUPPLEMENTAL INSTRUCTION:** Supplemental instruction (SI) will also be available for this class. The SI sessions are structured, student-led reviews of content that incorporate study skills. Nosheib Jadoon (nj7@geneseo.edu) and Claire Martin (cgm9@geneseo.edu) are the SI leaders for this section. Additional information will be provided during the first week of class.
- **WEEKLY FOCUSED WORKSHOPS:** There will be workshops offered several times each week that focus on mastering difficult concepts using active, hands-on approach. The same workshop will be offered several times per week (including weekends) and a schedule will be announced the first week of classes. We strongly advise you get into the habit of coming to at least one of these workshops per week.

GENERAL ASSISTANCE: The College provides many support services for any issues that may affect your academic performance. The following table outlines problems you may encounter during the semester and people to consult if this occurs:

Help resources	Problems
Dr. Leonard Sancilio, Dean of Students	emergencies or health issues that will keep you out of class for a significant period of time – MacVittie College Union 354B: sancilio@geneseo.edu
Health Center	Physical and mental health
Counseling Center	Problems adjusting to college, homesickness, making difficult decisions as well as traditional mental health diagnoses such as depression, anxiety or eating disorders
Disability Services Office	Services for students with documented needs for extra time to take exams and/or distraction-free settings. – Erwin 22: disabilityservices@geneseo.edu
ESOL (English for Speakers of Other Languages)	with English fluency, Katherine Menec, kmenec@geneseo.edu for students new to English as the primary language of instruction

IMPORTANT DATES

Jan. 28	Drop/Add Period Ends
Feb. 12	Exam I
Mar. 04	Exam II
Mar. 10	Midsemester
Mar. 13 - 20	Spring Break – no class
Apr. 07	Last day to withdraw from full semester courses
Apr. 08	Exam III
Apr. 22	GREAT Day - no class
May 6. 06	Exam IV
May. 12	Final Exam 12:00 – 2:30 pm, Newton 202

Course Outline, Spring 2020

Class Schedule	Date	Chapters (Subject to adjustment)	Instructor
Week 1: 1/22 – 1/24			
1.	January 22	Introduction / Syllabus / Schedule / Policies	Dr. Feissner
2.	January 24	Ch. 26 – Bacteria and Archea	"
Week 2: 1/27 – 1/31			
3.	January 27	Ch. 26/27 – Bacteria continued / Protists	"
4.	January 29	Ch. 27 – Protists	"
5.	January 31	Ch. 28 – Green algae and Land Plants	"
Week 3: 2/3 – 2/7			
6.	February 3	Ch. 28 – Green algae and Land Plants	"
7.	February 5	Ch. 29 – Fungi	"
8.	February 7	Ch. 29 – Fungi / Ch. 34 – Plant Form and Function	"
Week 4: 2/10 – 2/14			
9.	February 10	Ch. 34 – Plant Form and Function	"
10.	February 12	Exam 1 (chapters 26, 27, 28, and 29)	-

11.	February 14	Ch. 34 – Plant Form and Function	“
Week 5: 2/17 – 2/21			
12.	February 17	Ch. 35 – Water and Sugar Transport in Plants	“
13.	February 19	Ch. 35 – Water and Sugar Transport in Plants	“
14.	February 21	Ch. 36 – Plant Nutrition	“
Week 6: 2/24 – 2/28			
15.	February 24	Ch. 37 – Plant Sensory Systems, Signals, and Responses	“
16.	February 26	Ch. 37 – Plant Sensory Systems, Signals, and Responses	“
17.	February 28	Ch. 30 – An Introduction to Animals	Dr. McCartney
Week 7: 3/2 – 3/6			
18.	March 2	Ch. 31 – Protostome Animals	“
19.	March 4	Exam 2 (Chapters 34, 35, 36, 37, 30)	-
20.	March 6	Ch. 31 – Protostome Animals	“
Week 8: 3/9 – 3/13			
21.	March 9	Ch. 32 – Deuterostome Animals	“
22.	March 11	Ch. 32 – Deuterostome Animals	“
23.	March 13	Ch. 39 – Animal Form and Function	“
Week 9: 3/16 – 3/20 – Spring Break			
24.	March 16	no class	-
25.	March 18	no class	-
26.	March 20	no class	-
Week 10: 3/23 – 3/27			
27.	March 23	Ch. 40 – Water and Electrolyte Balance in Animals	McCartney
28.	March 25	Ch. 40 – Water and Electrolyte Balance in Animals	“
29.	March 27	Ch. 42 – Gas Exchange & Circulation	“
Week 11: 3/30 – 4/3			
30.	March 30	Ch. 42 – Gas Exchange & Circulation	“
31.	April 1	Ch. 43 – Animal Nervous Systems	“
32.	April 3	Ch. 43 – Animal Nervous Systems	“
Week 12: 4/6 – 4/10			
33.	April 6	Ch. 44 – Animal Sensory Systems	“
34.	April 8	Exam 3 (Chapters 31, 32, 39, 40, 42, and 43)	-
35.	April 10	Ch. 45 – Animal Movement	“
Week 13: 4/13 – 4/17			
36.	April 13	Ch. 47 – Reproduction	“
37.	April 15	Ch. 47 – Reproduction	“
38.	April 17	Ch. 49 – An Introduction to Ecology	“
Week 14: 4/20 – 4/24 (No Wed Class 4/22)			
39.	April 20	Ch. 49 – An Introduction to Ecology	“
40.	April 22	GREAT Day – No Class	“
41.	April 24	Ch. 51 – Population Ecology	Dr. Feissner
Week 15: 4/27 – 5/1			
42.	April 27	Ch. 51 – Population Ecology / Ch. 52 – Community Ecology	“
43.	April 29	Ch. 52 – Community Ecology	“
44.	May 1	Ch. 53 – Ecosystems and Global Ecology	“
Week 16: 5/4 – 5/6			
45.	May 4	Ch. 53 – Ecosystems and Global Ecology	“
46.	May 6	Exam #4 (Chapters 44, 45, 47, 49, 51, 52, and 53)	-
47.	May 12 (Tues)	Final Exam - 12:00-2:30 PM, Newton 202	-

DATE	Outside Class Assignments
01/22	All Tutorials for Chapters 26, 27, 28, & 29 are open. You can review them after the closing date. Also there will be adaptive follow-ups that will appear at this time. They are for your practice but meant to be of help. No penalty for not doing them.
01/23	Reading Quiz on Chapter 26 due at 11:59 pm.
01/26	Reading Quiz on Chapter 27 due at 11:59 pm
01/30	Reading Quiz on Chapter 28 due at 11:59 pm
02/04	Reading Quiz on Chapter 29 due at 11:59 pm
02/09	Reading Quiz on Chapter 34 due at 11:59 pm
02/10	Tutorials for Chapters 26, 27, 28, & 29 due at 11:59 pm
02/16	Reading Quiz on Chapter 35 due at 11:59 pm
02/20	Reading Quiz on Chapter 36 due at 11:59 pm.
02/23	Reading Quiz on Chapter 37 due at 11:59 pm.
02/27	Reading Quiz on Chapter 30 due at 11:59 pm.
03/01	Reading Quiz on Chapter 31 due at 11:59 pm.
03/02	Tutorials for Chapters 34, 35, 36, 37 & 30 due at 11:59 pm
03/08	Reading Quiz on Chapter 32 due at 11:59 pm
03/12	Reading Quiz on Chapter 39 due at 11:59 pm
03/22	Reading Quiz on Chapter 40 due at 11:59 pm
03/26	Reading Quiz on Chapter 42 due at 11:59 pm
03/29	Reading Quiz on Chapter 43 due at 11:59 pm
04/05	Reading Quiz on Chapter 44 due at 11:59 pm
04/06	Tutorials for Chapters 31, 31, 39, 40, 42, & 43 due at 11:59 pm
04/09	Reading Quiz on Chapter 45 due at 11:59 pm
04/12	Reading Quiz on Chapter 47 due at 11:59 pm
04/16	Reading Quiz on Chapter 49 due at 11:59 pm
04/23	Reading Quiz on Chapter 51 due at 11:59 pm
04/28	Reading Quiz on Chapter 52 due at 11:59 pm
04/31	Reading Quiz on Chapter 53 due at 11:59 pm
05/04	Tutorials for Chapters 44, 45, 47, 49, 51, 52 & 53 due at 11:59 pm

Note: The schedule of topics may be subject to change. If so, the content coverage of exams will be adjusted, rather than the exam dates. Similarly, dates for quizzes and tutorials sometimes need to change. Schedule changes are announced by email and in class.

Accommodations: SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities. Accommodations will also be made for medical conditions related to pregnancy or parenting. Students should contact the Office of Disability Services (disabilityservices@geneseo.edu or 585-245-5112) and their faculty to discuss needed accommodations as early as possible in the semester. Students who have been using English as their primary language of instruction for less than 6 years and who are taking active steps to improve their English (such as enrolling in Writing 101 or 201) can have extra time for taking exams in this section of Biol. 119 by special arrangement.

IMPORTANT POLICIES FOR BIOLOGY 119

Policies are designed to ensure fairness and consistency in responding to situations you may encounter. For each policy below, we provide an explanation of the underlying logic. We cannot anticipate every possible problem that may arise, and therefore policies can have limits and exceptions. If you are experiencing problems in completing class work for any reason, please drop by office hours or make an appointment to talk with one of us to discuss your situation.

Classroom etiquette: Our goal is to create a classroom environment in which everyone can learn. Your choices in lecture affect the learning experiences of other students in the class as well as your own. Wherever possible, please arrive on time, stay throughout class, and limit conversation in class to directed class discussions. Mute or silence your devices. If you have an emergency for which you need your cell phone to be turned on, or for which you must leave early, let the instructor and the people sitting around you know.

The use of technology in class has many educational benefits, and using laptops, phones or other technology for viewing class materials during lecture is permitted. Texting, use of social media, checking e-mail, shopping, playing games and other non-class related uses of technology not only reduce your class participation, they can also distract those around you. If the behavior of other students around you is affecting your learning, let them know, and please tell us as well. If you disrupt the lecture or are distracting others around you, you may be asked to leave.

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Communication: Check your e-mail daily in order to ensure that you receive important updates and reminders, and set Canvas to provide daily emails or texts. The best ways to communicate with instructors are face-to-face (before or after class or during office hours) or email. We each teach several classes therefore when sending us emails, please include your name and Biol. 119. Please recognize also that we have lives outside of our jobs, and emails sent outside of business hours may not be answered until the next business day.

Missing exams: All four exams are required. Sometimes it may be necessary to miss an exam. To make up an exam, you will need to explain your absence, and may need to provide documentation. Examples of valid reasons for missing exams include (but are not limited to) personal illness, death or serious illness in your family, representing the college, religious observances, and required training for work or military service. Where you can anticipate your absence in advance, discussion of alternative arrangements should take place ahead of the exam. For emergencies arising on the day of the exam, contact us as soon as possible (i.e., within 24 hours). Wherever possible we will have you take the same exam as other students as this provides you with a better assessment of how you are doing. However, to be fair to other students, this can only happen if you can make up your test quickly so that they can get their exams back. In the event that you cannot make up your test promptly (generally 2-3 business days), we reserve the option to require that you make up the exam for that quarter during the final exam period in addition to (not instead of) your repeated final.

Missing quizzes, tutorials and participation: The full benefit of reading quizzes occurs before, and not after class. However, we know that things come up and you might miss a quiz deadline. You can make up a maximum of two quizzes during office hours, with these limitations: 1) you must make it up during the first opportunity (normally within a week) and 2) you will not be able to use the text book or notes.

The deadlines for tutorials are designed to allow time for you to analyze your performance and seek help on specific concepts before each exam. You have three weeks to complete the assignments in time for the due date 2-3 days before the test. After the due date, there is a steep decline in the points you can receive (33%) per day, so that by the day of the test, you cannot earn credit.

Note that if you complete a quiz or tutorial, even if you get most or all of the answers wrong, you will be able to review from it later, but if you do not complete it, you cannot use it for review. It is therefore always better to complete the online activities, even with low scores, than to skip them. Finally, we know that we all occasionally make mistakes beyond missing deadlines. To cover these cases, one quiz and one tutorial will be dropped each quarter. The policies above may be further modified on a case-by-case basis for students working with the Dean of Students or with the Office of Disabilities Services. If you will be absent and unable to attend class or complete the online activities for a prolonged period of time, please contact us along with the Dean of Students, Dr. Sancilio. Similarly, if you are working with Disabilities Services and have accommodations related to attendance, please meet with us to discuss your accommodations.

Appealing grades: Any graded work may be submitted for re-evaluation along with a written appeal. The basis for your appeal will usually be either (1) ambiguity in class notes or reading materials, or (2) ambiguity in the test question. The appeal should contain a brief written explanation of your concerns, including your reading of the ambiguous written material, and why you answered the question the way that you did. Appeals should be turned in within one week of receiving the graded work. When you submit your written appeal, we will schedule an individual conference to discuss it.

Academic dishonesty: Academic dishonesty includes both cheating as well as misrepresenting your identity. Academic dishonesty devalues other students' efforts to succeed in the class. Cheating here refers to violating the rules of exams, including collaboration, copying from other students' work, or consulting outside sources. Misrepresenting your identity includes taking online quizzes for others or having them complete assignments for you, having another person earn participation points for you, or sending another person to take your exam. Because Biology 119 is an entry point to the Biology major, we may ask that you present identification during exams. The penalty for cheating or misrepresenting your identity will be a grade of zero on the quiz or exam involved. Because academic dishonesty is defined in detail here, claiming ignorance of the definition or policies cannot serve as an excuse.

VERY IMPORTANT INFORMATION ABOUT POLICIES FOR THE BIOLOGY MAJOR:

Biology and Biochemistry Proficiency: Students must have a C+ or better average in their **first two REQUIRED Biology lecture courses at SUNY Geneseo** to remain as Biology or Biochemistry majors. For most this is Biol 117 and Biol 119 but for those accepting AP credits or transfer students it could be other combinations.

Minimum Competence Requirement: To graduate with a biology major, students must attain a grade of C- or better in all required biology courses (excluding electives). A grade of C- must be achieved in any course before it can be used as a prerequisite for another course. A student may only repeat a required biology course or related requirement once for major credit and the course must be taken at the next offering of the class. If a student does not earn at least a "C-" on the second taking of the class, she/he will not be able to complete the major.