

BSc 510 Community Ecology Course Syllabus



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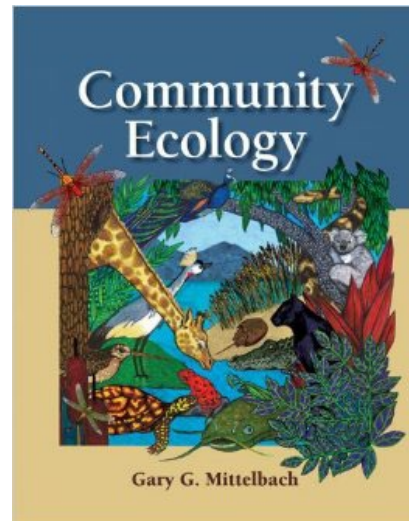
Preferred form of Communication: Email

DON'T CALL ON THE PHONE!!

Course Information

Textbook Required:

Gary Mittelbach, 2012. Community Ecology.
ISBN 978-0-87893-509-3



Course Description

Course catalog description: BSC 510 - Community Ecology - Three semester hours. Community ecology is the study of biotic interactions in plant and animal assemblages. This course begins with a description of community types. More detailed material follows: competition and ecological niche, predator-prey interactions, food webs, habitat selection, and diversity. The material is supported by numerous examples from models and experimental studies.

Course Material:

This course requires an understanding of biological processes, particularly those related to population biology, ecology, and biogeography. You should have a basic understanding of cellular and population genetics. The course itself is about the development, maintenance, and interactions that occur in ecological communities. There is a lot of material to cover in a very short time, so you are strongly advised not to let yourself get behind in assigned reading materials. You are going to be doing a lot of reading and must read comprehensively. Tests must be taken on the assigned dates and there will be no make-up tests. Tests are open book and will consist of critical thinking questions. All assignments must be turned in at the assigned time. There will be no tolerance of late assignments and there will be no extra credit assignments. **Be sure that you are familiar with the course schedule and keep on track.**

**Student Learning Outcomes**

1. Students will be able to define an ecological community and to articulate the underlying processes that maintain these communities.
2. Students will demonstrate knowledge of the biogeography of species diversity.
3. Students will be able to apply population models in the context of a community dynamics.





4. Students will be able to define the difference between food chains and food webs and the controlling factors and cascading effects associated with them.
5. Students will understand the relationship between patchy environments and meta-populations and metacommunities.
6. Students will understand the ecological and evolutionary responses of species to changing environments.

Course Requirements

Minimal Technical Skills Needed

1. Must be able to use the learning management system (MyLeo Online)
2. Must be able to use MS-Word
3. Must be able to read the English language
4. Must be able to use a calendar and take tests on the appropriate date
5. Must be able to communicate via email and

DO NOT CALL ME ON THE PHONE!

Instructional Methods

This is an ONLINE course. All of the content is delivered online. There are no class meetings.

Students are expected to read the relevant chapters in the textbook. Students are responsible for learning the material in the textbook. Make sure you are familiar with the course schedule and make time to take the tests on the days that they are scheduled. Similarly, students are responsible for turning in chapter reviews on or before the date that they are due on.

Student Responsibilities or Tips for Success in the Course

You are responsible for ensuring that you complete all of the tests in a timely manner. Make sure you get the textbook prior to the start of class. When you are ready to take a test, make sure you have both the textbook available to refer to. Review the materials beforehand. Book-marking important sections of the textbook may also be very useful and help you look up answers more quickly.

There is a mid-term test and a final exam. Many of the questions on these tests come from the chapter tests. Therefore, when you are ready to take one of these tests, make sure you have, in addition to the textbook, copies of your chapter tests available to look up answers.

Grading and Course Content

The textbook is mandatory. You will be required to read each of the assigned chapters. **This is not a self-paced course!** You must complete all tests and assignments on the date they are due. All students are responsible for keeping track of due dates. **I will not be sending you reminders.**

Course Schedule

There are 16 chapters in the course textbook and this course will cover all of them. Consequently, there is a lot of reading and writing involved in the class, so it is essential that you stay on schedule. The course material will follow the schedule below:

Chapter	Number of Pages	Review Due	Quiz Due
Chapters 1 & 2: Community Ecology's Roots/Patterns of Biological Diversity	40	January 19	January 19 or 20
Chapter 3: Biodiversity and Ecosystem Functioning	21	January 26	January 26 or 27
Chapter 4: Population Growth and Density Dependence	17	February 2	February 2 or 3
Chapter 5: The Fundamentals of Predator-Prey Interactions	20	February 9	February 9 or 10
Chapter 6: Selective Predators and Responsive Prey	21	February 16	February 16 or 17
Chapter 7: Interspecific Competition	23	February 23	February 23 or 24
Chapter 8: Competition in Nature	25	March 1	March 1 or 2
Chapter 9: Beneficial Interactions in Communities	20	March 8	March 8 or 9
Chapter 10: Species Interactions in Ecological Networks	26	March 22	March 22 or 23
Chapter 11: Food Chains and Food Webs	26	March 29	March 29 or 30
Chapter 12: Patchy Environments, Metapopulations, and Fugitive Species	16	April 5	April 5 or 6
Chapter 13: Metacommunities and the Neutral Theory	19	April 12	April 12 or 13
Chapter 14: Species Coexistence in Variable Environments	27	April 19	April 19 or 20
Chapters 15& 16: Evolutionary Community Ecology/Some Concluding Remarks and a Look Ahead	29	April 26	April 26 or 27
Article Review		May 6	
Final Exam (All Chapters)			May 8 or 9

For each week, you will have to write a brief review of the chapters you read that week and there will be a quiz over those chapters. Note that, in the schedule above, except for the first and last weeks, there will be only one chapter per week. There are two chapters included in the first week and again in the last week.

In addition, all students will complete an article review. A description of these assignments is provided below. The grading scheme will be as follows:

Grading Scheme:		
Chapter Reviews	14@ 3 % each	42%
Chapter Quizzes	14@ 2 % each	28%
Article Review	1 @ 10% each	10%
Final Exam	1 @ 20% each	20%
Total		100 %



Red Paper Wasp (*Polistes carolina*),
Sulphur Springs, Texas

Red Paper Wasp (*Polistes carolina*),
Sulphur Springs, Texas

Grade Assignments are as follows:

F= < 50%, D = 50 - 69%, C = 70 – 79%, B = 80 – 89%, A >90%

****Disclaimer:** The instructor reserves the right to make changes to the schedule and grading scheme of the class. Any alterations will be announced in D2L or via email by the instructor. Students who do not check D2L or their email assume responsibility for missing adjustments to the course.

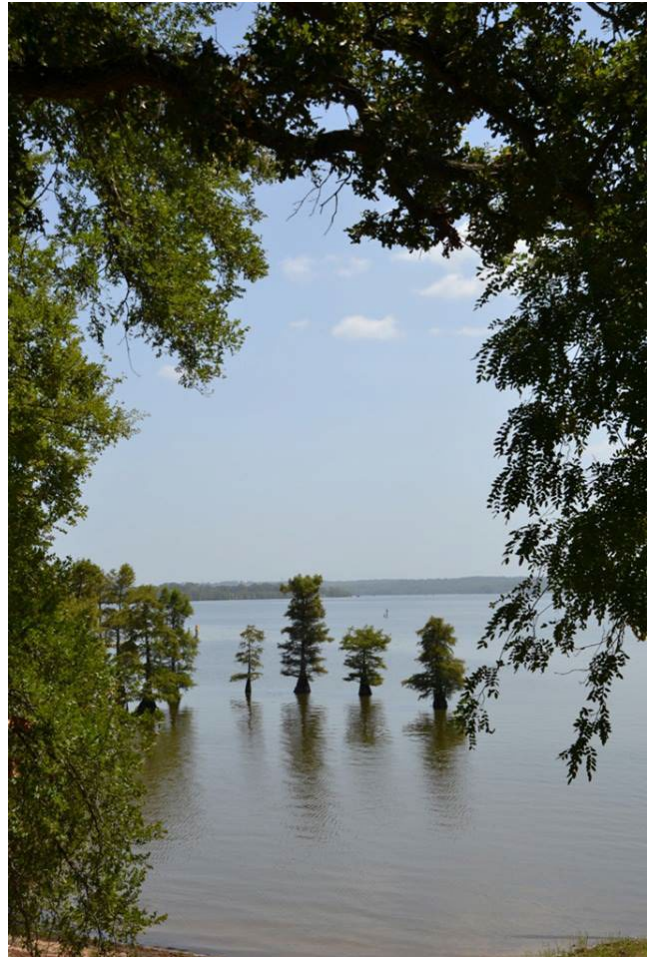
PLEASE NOTE: All students are responsible for having secure and reliable internet service. Nonetheless, internet services can be unpredictable at times. For this reason, **DO NOT WAIT UNTIL THE LAST MINUTE TO TAKE ONLINE QUIZZES.** If you try to take a quiz after 11:00 PM, and your internet fails, I will not re-open the quiz and you will lose the points for that quiz.

Chapter Reviews

For each chapter you will write, in your own words, a summary of the content of that chapter. **Do not use any quotes. You will lose points for using quotes.** Write everything out in the form of paragraphs: **Do not use point form. You will lose points for using point form.**

You must highlight the major topics covered by the chapter and how these topics are relevant to the theme of the chapter. Close each chapter review with a personal comment on what you thought about the material covered in the chapter. **You will lose points for failing to include a personal comment on the chapter at the end of your review.**

Your chapter reviews must be in **MS-Word format** and submitted by the due date indicated in the course D2L shell. **Reviews not in MS-Word format will receive a grade of zero.** Put your name on your review. Reviews must be written using Times New Roman, 12-point font, double spaced, no extra spaces between paragraphs, with 1" margins on all sides. Include a title page with your name and the title of the chapter you are reviewing. **You will lose points for not following this format.**



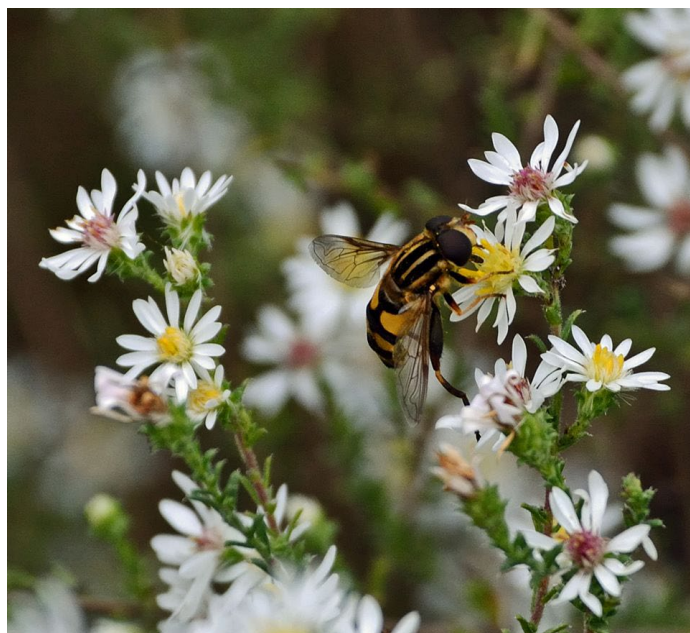
You need to write a 5-page review if you expect full points because even with 5 pages it is hard to cover the material comprehensively. Reviews longer than five pages will not be penalized. Having said that, excessive verbosity and padding will get you nowhere. If you wish to include figures and tables, do so by appending them to the back of the review. Figures and tables do not count toward the page limit. All chapter reviews must be submitted through D2L in **MS-Word Format. Do not submit pdf documents.**

Chapter Quizzes

Each chapter will be followed by a chapter quiz. The chapter quiz will consist of 10 multiple choice questions. Quizzes will cover all material in the chapter, including information in figures and tables. Quizzes will be timed, and students will have 25 minutes to complete the quiz. You will be expected to have full comprehension of the material. As a result, some questions will require that you apply concepts covered in the chapter to examples that are not specifically mentioned in the textbook.



Article Reviews



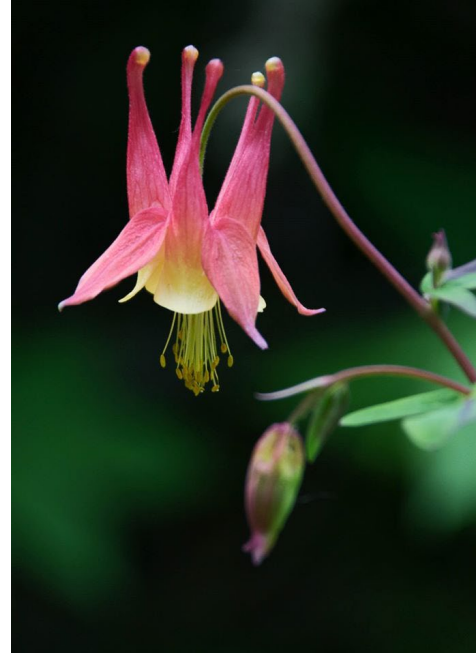
During the semester you will select a current peer-reviewed article related to the material covered in the textbook. You will be required to write a review of this article. It is extremely important that you choose a peer-reviewed journal article. To approach this assignment, flip through the various chapters in the textbook that are covered in the course. Find a topic that interests you and look for recent articles (2014 or more recent) on that subject. Google scholar can be most useful for this purpose. Once you have found an article, please let me know so that I can evaluate its suitability. **You need to do this early just in case you have to use an inter-**

library loan to get the article.

Start with a title page that includes your name, the date, the course title, and the full citation of the article you are reviewing. Using your own words, describe the important background literature relative to the article (include citations), the purpose of the article, the methods used, and the major findings of the article. Describe the significance of the work to the field of study and in the context of existing literature on the subject. In doing so, you should read some of the background articles related to the one you are reviewing. Make sure you cite these articles in your review. Also include your opinion on the value of the article and its methodology and its level of interest to you. Your review must be in MS-Word format and submitted by the due date indicated on the course D2L page. Reviews **must be written using Times New Roman, 12**

point font, double spaced, no extra spaces between paragraphs, with 1" margins on all sides. Include a title page with your name and the title of the paper you are reviewing.

You review should be no less than six pages and no more than 10 pages, not including the title page. If you wish to include figures and tables, do so by appending them to the back of the review. Figures and tables do not count toward the page limit. All **reviews and a copy of the article** must be submitted through D2L. to the back of the review. Figures and tables do not count toward the page limit. All **reviews and a copy of the article** must be submitted through D2L.



Final Exam

The final exam will be comprehensive. It will consist of 50 questions and you will have 2 hours to complete it.

Important note about Due Dates and Times



Please make sure you keep close track of all due dates. You can turn in your reviews at any time up to and including the review due date. You cannot turn in the review after the due date. This will allow you to work ahead if you want. However, keep in mind that the whole purpose of writing the review is to help you study for the test, so if you work too far ahead you will probably defeat that purpose. Also, I will not grade any reviews until after the review due date.

All quizzes and tests are scheduled over two days. You can take the test on either of the two days that it is open. Please look at the schedule in the syllabus carefully. You will need to allow 30 minutes for the quizzes. You can only take the quiz once, so once you are done you are done.

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you turn in an assignment or try to take a quiz after 11:00 PM, I will not re-open the assignment or quiz and you will lose points for that assignment or quiz.

Procrastination Penalty

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Important Note: This course uses Turnitin plagiarism software. This software compares all course submissions (chapter reviews, article reviews, etc.) to all published and unpublished materials including the course textbook and other student papers. It calculates a percentage match to these materials. Any student whose assignment yields a 20% or higher match will get a zero for their assignment. In the case of a 20% or higher match among two or more students, all of the individuals involved will get a zero for their assignment.



Scroll to the next page for the course schedule

January

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
7	8	9	10 1 st Class	11	12	13
14	15  No Class	16	17	18	19 Ch 1 & 2 Review and Test	20 Chapter 1&2 Test
21	22	23	24	25	26 Ch 3 Review and Test	27 Ch 3 Test
28	29	30	31			

February

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2 Ch 4 Review and Test	3 Ch 4 Test
4	5	6	7	8	9 Ch 5 Review and Test	10 Ch 5 Test
11	12	13	14	15	16 Ch 6 Review and Test	17 Ch 6 Test
18	19	20	21	22	23 Ch 7 Review and Test	24 Ch 7 Test
25	26	27	28	29		

March

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1 Ch 8 Review and Test	2 Ch 8 Test
3	4	5	6	7	8 Ch 9 Review and Test	9 Ch 9 Test
10	11 SPRING BREAK	12 SPRING BREAK	13 SPRING BREAK	14 SPRING BREAK	15 SPRING BREAK	16
17	18	19	20	21	22 Ch 10 Review and Test	23 Ch 10 Test
24	25	26	27	28 Drop Date	29 Ch 11 Review and Test	30 Ch 11 Test
31						

April

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5 Ch 12 Review and Test	6 Ch 12 Test
7	8	9	10	11	12 Ch 13 Review and Test	13 Ch 13 Test
14	15	16	17	18	19 Ch 14 Review and Test	20 Ch 14 Test
21	22	23	24	25	26 Ch 15&16 Review and Test	27 Ch 15&16 Test
28	29	30				

May

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1 Study Day	2 Study Day	3 Study Day	4
5	6 Article Review Due	7	8 Final Exam	9 Final Exam	10	11

Obligatory Statements:

****Disclaimer:** The instructor reserves the right to make changes to the schedule of the class. Any alterations will be announced in class, in D2L or via email by the instructor. Students who do not attend class, check D2L or their email assume responsibility for missing adjustments to the course.

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- **Ensure that your browser has JavaScript and Cookies enabled.**
- **For desktop systems, you must have Adobe Flash Player 10.1 or greater.**

- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:

- o 512 MB of RAM, 1 GB or more preferred
- o Broadband connection required courses are heavily video intensive
- o Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

You must have a:

- o Sound card, which is usually integrated into your desktop or laptop computer

- o Speakers or headphones.
- o *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site

<http://www.java.com/en/download/manual.jsp>

Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:

o Adobe Reader <https://get.adobe.com/reader/>

o Adobe Flash Player (*version 17 or later*) <https://get.adobe.com/flashplayer/>

o Adobe Shockwave Player <https://get.adobe.com/shockwave/>

o Apple Quick Time <http://www.apple.com/quicktime/download/>

- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

Need Help?

Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words “click here” to submit an issue via email.

System Maintenance

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

Interaction with Instructor Statement

Please communicate via email. I am in front of a computer almost all day long, so if you want to communicate with me, email is the best way. Generally, I can respond within a few hours. I am generally unavailable for quick responses after 5:00 and on weekends.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Procrastination Penalty

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Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette

<http://www.albion.com/netiquette/corerules.html>

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

Graduate Student Academic Dishonesty 13.99.99.R0.10

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services
<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.