

### **Pre-Statistics – Math 0411.NM1**

**Course Syllabus: Fall 2017** 

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	3:00 - 5:00	3:00 - 6:00	3:00 - 5:30	3:00 – 5:30	Ву	
					Appointment	

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

### **Catalog Course Description (include prerequisites):**

Lecture/Lab/Clinical: Four hours of lecture each week.

Co-requisite: EDUC 1300

This course surveys a variety of mathematical topics needed to prepare students for college-level statistics. Topics include: numeracy with an emphasis on estimation and fluency with large numbers evaluating expressions and formulas; rates, ratios, and proportions; percentages; solving equations; linear models; data interpretations including graphs and tables; verbal, algebraic and graphical representations of functions; exponential models.

### **Required Textbook(s):**

- a. NMP loose leaf book Math 0411 Foundations Course
- b. 3-ring binder for this class only
- c. A graphing calculator (TI-84, TI-84 Plus, or similar)
- d. Writing materials Pencils, eraser, highlighters (SEE NTCC BOOKSTORE for list)
- e. Working NTCC email account
- f. Basic computer skills to access online resources and information

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### **Recommended Reading(s):**

None

### **Student Learning Outcomes:**

Upon successful completion of this course, students will:

- 0411.1 Students will develop number sense and the ability to apply concepts of numeracy to investigate and describe quantitative relationships and solve real-world problems in a variety of contexts.
- 0411.2 Students will use proportional reasoning to solve problems that require ratios, rates, proportions, and scaling.
- 0411.3 Students will transition from specific and numeric reasoning to general and abstract reasoning using the language and structure of algebra to investigate, represent, and solve problems.
- 0411.4 Students will understand and critically evaluate statements that appear in the popular media (especially in presenting medical information) involving risk and arguments based on probability.
- 0411.5 Students will understand, interpret, and make decisions based on financial information commonly presented to consumers.
- 0411.6 Students will understand that quantitative information presented in the media and by other entities can sometimes be useful and sometimes be misleading.

**Learning Goals** – This course is a quantitative reasoning course. This means you will learn to use, understand, and communicate about quantitative information. The course has five goals:

- 1. Communication goal: You will interpret and communicate quantitative information and mathematical and statistical concepts using language appropriate to the context and intended audience.
- 2. Problem solving goal: You will make sense of problems, develop strategies to find solutions, and persevere in solving them.
- 3. Reasoning goal: You will reason, model and make decisions with mathematical, statistical, and quantitative information.
- 4. Evaluation goal: You will critique and evaluate quantitative arguments that utilize mathematical, statistical, and quantitative information.
- 5. Technology goal: You will use appropriate technology in a given context.

## **Overarching Content-based Mathematics and Quantitative Literacy Learning Outcomes**

- Numeracy: Students will develop number sense and the ability to apply concepts of numeracy to
  investigate and describe quantitative relationships and solve real-world problems in a variety of
  contexts.
- Proportional Reasoning: Students will use proportional reasoning to solve problems that require ratios, rates, proportions, and scaling.
- Algebraic Competence, Reasoning, and Modeling: Students will transition from specific and numeric to general and abstract reasoning using the language and structure of algebra to investigate, represent, and solve problems.
- Assessing Risk (Probabilistic Reasoning): Students will understand and critically evaluate statements involving risk and arguments based on probability that appear in the popular media, especially in presenting medical information.
- Personal Finance: Students will understand, interpret and make decisions based on financial information that is commonly presented to consumers.
- Civic Life: Students will understand that quantitative information presented in the media and by other entities can sometimes be useful and sometimes misleading.

# **Evaluation/Grading Policy:** The grade for this course will be based on the following:

1. Homework – Practice assignments must be completed on time. Homework grades will include homework assignments, occasional notebook checks, and occasional quizzes. These will all average together to count for 20% of your final course grade. **Note that homework is done online through MyMathLab.** 

<u>Notebook</u> – Chronological order of work completed. A Notebook Check will happen occasionally as announced to help monitor student learning.

No late work will be accepted.

- 2. Tests will count as 50% of your final course grade. Three tests will be given this semester. Each student is required to take all unit tests. Make-up tests *may* be allowed if the student contacts the professor before the next class meeting before the test.
- 3. Final Exam The final exam will be a comprehensive exam and will count as 25% of your final course grade. A comprehensive final exam is mandatory for all students.

$$A = 90-100\%$$
,  $B = 80-89\%$ ,  $C = 70-79\%$ ,  $F = 69\%$  or lower

The percentage break-down is as follows:

Exam 1 15%
Exam 2 15%
Exam 3 20%
Homework Assignments 25%
Comprehensive Final 25%

### **Student Responsibilities/Expectations:**

All students are expected to be present and on time for every class meeting. If you are diligent about attendance and promptness, the following points will be added to your total points in homework assignments:

Absences/Tardies	Points Added
0	50
1	40
2	30
3	20
4	10

There will be no difference between excused and unexcused absences. If it *is* necessary for you to miss a class, it is **your** responsibility to contact me or another student **before** the next class. Work that is assigned during a missed class is still due for you, too.

### **Classroom Etiquette:**

Two things are critical to our class: **First**, that your attention is on the topic in class and **second**, that your show the appropriate respect to your classmates.

Therefore, please do not do the following while in class: talk/text on cell phones, talk about non-mathematical topics, come late to class, eat during class, use tobacco products during class, sleep, and/or talk while the instructor is talking.

### **Other Course Requirements**

A graphing calculator is required for this course. The TI-84 Plus is recommended.

### **NTCC Academic Honesty Statement:**

"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

#### **Academic Ethics**

The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

#### **ADA Statement:**

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with Shannin Garrett, Academic Advisor/Coordinator of Special Populations located in the College Connection. She can be reached at 903-434-8218. For more information and to obtain a copy of the Request for Accommodations, please refer to the <a href="NTCC website - Special Populations">NTCC website - Special Populations</a>.

### Family Educational Rights And Privacy Act (Ferpa):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

**Campus Safety:** Northeast Texas Community College (NTCC) is committed to maintaining the safety of the students, faculty, staff, and guests while visiting any of our campuses. See NTCC's website for details and to receive emergency notifications automatically by phone. In the event of an emergency contact NTCC Police at 903-434-8127.