

MAT 772 - Applied Math
Instructors: Mr. Lofgren and Mrs. Grager
Location: Ankeny Centennial High School, Room 1406
DMACC Credits: 3
Ankeny Centennial High School Math Credit: 1

Description: A course in elementary math skills for technicians. Topics covered include fundamental operations with whole numbers, fractions, decimals and signed numbers; percent; area and volume of geometric figures; basic constructions; English/Metric systems; measurements; interpretation of graphs and charts, and practice with college prep exams.

You may earn 3 credit hours of DMACC credit for MAT 772 Applied Math upon successfully completing this course. DMACC competencies for MAT 772 will be covered. You can see the full set of competencies online.

Email: warren.lofgren@ankenyschools.org and jill.grager@ankenyschools.org

Phone: 515.965.9610

Office Hours: Before and after school by appointment in Room 1406. Please email with any concerns.

Pre-Requisite: You must have completed Algebra I.

College Credit: This course is for DMACC credit.

Course Materials:

1. 2 folders are recommended. 1 for the current work and 1 to archive or store your completed work.
2. Come prepared with paper, pencil (must use on tests) and pen (for checking).
3. A compass is used for the construction unit but one will be provided if you need it.

Student Responsibilities:

1. **Ask questions when you don't understand.** When a student brings questions, then clarification can take place.
2. **Take notes.** With all the information you will be presented during the course of a day, a method is needed to recall what transpires in this class. Examples will be given which will need to be referred to at times.
3. **Practice the skill being taught.** There is no shortcut for practicing a skill. You can get better at any skill by correctly doing the skill over and over again. To succeed at any skill, you must practice.
4. **Be on task and courteous to others.** The nature of this course allows you the opportunity to develop math skills that are directly related to your future job skills. Not everyone will be doing the same activities at the same time so it is essential that you be respectful of everyone in the classroom. I expect you are on task at ALL times. If you have completed your work, then you should quietly work on another subject or work on the college prep materials. You will get out of this course what you put into it.
5. **Be prepared:** When you are prepared and have done your work class will be more interesting and rewarding.
6. **Check online resources.** I use my webpage frequently for updates. Most, if not all, class materials will be posted there as well as the class schedule. Changes made to the syllabus or course will be posted. It is your responsibility to stay updated.
7. **Plan ahead.** Some assignments will be electronic in nature and will require you to access technology.

Course Configuration: This course will be organized into several learning units throughout the semester

- Each unit will be approximately 7-10 days in length.
- Assessments may include typical math problems to work out, multiple choice and short answer types of questions and some will be a project rather than a traditional test
- Each day we will usually have a short lesson, some practice time on the current concept and computation practice.

Construction Unit: This unit will mostly be completed outside of class. If we are efficient with our class time we may be able to work on them in class, but it is not guaranteed.

18 Week Grading:

Each standard will be equally weighted in your 18 week grade. We will cover standards of computation, ratios and proportions, the metric unit, measurement, and geometry.

Grading scale per the student handbook.

Minimum Percent	92.5	89.5	86.5	82.5	79.5	76.5	72.5	69.5	66.5	62.5	59.5	Below 59.5
Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

Retake Policy for exams some projects:

Please review the reassessment policy found at the end of this document.

If you are absent:

It is your responsibility to find out what you missed if you are absent. If you miss a quiz or test, you may make these up before school, after school or during a study hall. A missing quiz or test score will be recorded as zero until you complete it. Be sure to communicate with me about extenuating circumstances.

Seeking Help:

I am available before and after school most days. I occasionally have meetings at different times. Check with me to schedule a time to meet. Take advantage of SOS, it can provide you with a quiet place to work. Also, my time and yours is very valuable, please come prepared with your questions. If you feel you are slipping behind, please ask for extra help.

Textbook and Resources:

Elementary Technical mathematics (10th edition) Dale Ewen and C. Robert Nelson

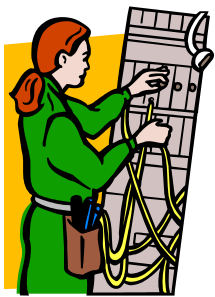
Construction Instructions: online and available in class

Help Sheets

Formula Sheets

Attendance	We follow the Ankeny Centennial High School procedures.
Grading criteria	The criteria have been addressed with this document.
Classroom conduct	Respectful and Academic (no cell phones without permission)
Missed exams	They will be entered as a zero and should be made up in a timely manner.
Late assignments	Due to the college nature of this course, late assignments are not generally accepted.
Extra credit	None
Study expectations	Homework should be done and checked before class.
Academic dishonesty	See high school academic integrity policy for information on plagiarism, cheating, information about appeals procedures or reference publication that addresses this information in detail.
Electronic Device Policy	As per the Handbook: All students will follow the "courtesy electronic device/cell phone" policy. Students are instructed to refrain from electronic device/cell phone usage during instructional class time. Instructional class time is defined as lectures, presentations, group work, activities, labs, etc. Teachers will inform students when or if cell phones are permitted in their classes.
Insubordination/Disrespect	Students are to respond promptly to the directions of staff members and to act respectfully toward staff members at all times. Refusal to do so is considered a serious breach of student expectations. Insubordination/disrespect which amounts to gross disobedience or misconduct, and/or disruption of the school environment will result in disciplinary action, up to and including expulsion, depending on frequency of occurrence and/or severity of the incident.

Note: This syllabus is a tentative outline as far as topics and units. Individual assignments, deadlines and topics may change slightly. Please check online for updates on a regular basis. The grading percentages will not change throughout the semester.



Applied Math Retake Requirements



Name _____

Period _____

Assessment to Retake _____

DEADLINE TO RETAKE (two weeks from date original assessment is returned) _____

All of the following requirements must be met in order to be eligible to retake an assessment.

The retake grade will replace the original grade (whether it is better or worse).

Prior to the original assessment:

- ☐ I completed the entire assigned homework/practice packet.
- ☐ I have completed all of the in-class activities, work, and notes.

After the assessment and **before** the reassessment:

- ☐ I have completed **additional practice** to review the assessment topics. (*Attach practice*)
- ☐ I attended seminar to prepare for the reassessment. *Seminar date:* _____
- ☐ I watched a relevant video on the assessment topic from YouTube, Khan Academy, or class website, AND took thorough notes on it (notes can be in notebook or else on back of this page). *Record video title and web address here* _____
- ☐ I have corrected and shown all of my work to the problems I missed on the first assessment. I have also written out an explanation for each mistake I made. (*Attach corrections with explanations to this page.*)
- ☐ I have scheduled a time, date, and place for retaking the assessment. **Consider retaking in S.O.S. after school on Monday through Thursday.**
Time, date, and place of reassessment: _____

What will you do differently before future assessments to help ensure that you will be more successful the first time?

Behavioral Expectations

The work habits/behavior standards are for grades 6-12 courses in our district. These work habits/behavior standards will be reported throughout the semester and are as follows:

- Organization and Readiness
- Productivity and Accountability
- Collaboration Skills

For those of you accessing this document electronically, the work habits tool can be accessed [here](#). We will be using the following performance levels:

Performance Levels for Work Habits/Behavior Standards			
MS	PM	DM	NE
Meets Standard	Partially Meets Standard	Doesn't Meet Standard	No Evidence

These descriptors are intended for feedback and communication and do not impact a student's GPA.

Formative and Summative Assessment: Definitions

- **Formative Assessment:** Formal and informal processes teachers and students use to gather evidence for the purpose of improving learning.
- **Summative Assessment:** Assessments that provide evidence of student achievement for the purpose of making a judgment about student competence or program effectiveness.

How students will be graded on academics:

- Letter grades will continue to be assigned for all courses at the secondary level
- When utilizing the Levels of Proficiency (Beginning, Progressing, Meeting, Advanced), teachers will show the connection between a student's performance on the Performance Scale to the assigned grade. This connection will be communicated at the onset of its use and throughout the learning progression for the purpose of providing feedback.

Guiding Practices:

Multiple and Varied Assessment Opportunities

All students should have multiple and varied assessment opportunities to demonstrate higher levels of achievement. Additional opportunities may include being reassessed on only the content/skills not mastered, spiraling assessment of content/skill on subsequent assessments, reassessment of an alternate form of an assessment (e.g., Form B instead of Form A), student revisions of work products based on descriptive feedback, or alternative methods of assessments (e.g., an oral response rather than a written test).

Guidelines for reassessment opportunities include the following:

- Students will be provided the opportunity to be reassessed - best practice is to provide additional opportunities for students to demonstrate learning during future assessments.
- Teachers determine appropriateness and authentic need for reassessments.
- Reassessment method will be provided at the discretion of the teacher.
- Reassessments will be given within a reasonable time frame that the teacher determines and students will be communicated with in advance.

Homework / Independent Practice

Homework is an opportunity for students to practice skills, apply knowledge, review and build on past learning, and extend learning. Homework is individualized and based on each student's progress towards established standards. The purpose of the assignment will determine whether or not a grade is given and will be clearly articulated to students. Through independent learning tasks (homework), students assume more responsibility for their learning and are given opportunities to apply what they have learned to new situations or experiences.

Extra Credit and Bonus Points

To ensure that grades reflect progress toward and achievement of the standards, giving extra credit points or bonus points will not occur in this class.

Performance Levels for Work Habits/Behavior Standards:

MS = Meets Standard

PM = Partially Meets Standard

DM = Doesn't Meet Standard

NE = No Evidence

These descriptors are intended for feedback and communication and do not impact a student's GPA.

Regarding the New High School Credit Law

*In accordance with a new Iowa law awarding non-high school students HS department credit, Ankeny will be awarding department (Math, Modern Language, PE) credit for any high school course they have taken - such as Algebra I, Spanish I, French I and in some cases, Geometry or Algebra II. While Ankeny Community Schools will be awarding department credit as per the law, students will **not** have that grade calculated into a grade point average based on their performance in the class. This means they will receive a letter grade on their report card and their transcript but that letter grade will not be included in their grade point average.*

**District Office 306 SW School Street PO Box 189 Ankeny, IA 50021-0189
P: 515.965.9600 F: 515.965.4234 W: ankenyschools.org**

Ankeny Community School District does not discriminate based on race, color, creed, religion, national origin, sex, gender identity, age, disability, marital status, sexual orientation, physical attributes, physical or mental ability or disability, ancestry, political party preference, military affiliation, socioeconomic status, or familial status. Inquiries or grievances may be directed to Kenneth Morris, Director of Equity, 306 SW School Street, 16 P. O. Box 189, Ankeny, IA, 50021-0189, (515) 965-9600, kenneth.morris@ankenyschools.org; or the Iowa Civil Rights Commission, Grimes State Office Building, Des Moines, IA, 50319-0201, (515) 281-4121; or the U.S. Department of Education, Office for Civil Rights, 500 West Madison Street, Suite 1475, Chicago, IL 60661.

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