Course Description: An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with machining trade. Practice of basic layout and piece part measurements while using standard measuring tools.

Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.


Course Goal/Objectives: The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. Upon successful completion of the course the student will; (*designates a CRUCIAL Goal)

1. Basic operations with whole numbers
2. Basic operations with fractions
3. Basic operations with decimals
4. Measurements
5. Equations, formulas, and square roots
6. Ratio, proportion, and percent
7. Precision measuring instruments
8. Geometry
9. Applied geometry
10. Shop trigonometry

Performance Objectives:
Addendum A: 1. The student will be enrolled in MCHN 1320. The student will exhibit professional behavior. Performance will be satisfactory if;
   a. College attendance is adhered to
   b. Student participates in class
   c. Student maintains a positive attitude
2. Unless otherwise stated, the student will be allowed references, including research material located in the Midland College Building Technology Library. The student will be provided demonstrations for each of the content goals as seen necessary by the instructor. These goals will be complete and satisfactory is consistent with NHBA and the course text.
3. Satisfactory performance will be measured by an objective and/or application exam and instructor’s observation.

Evaluation of Students:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Plato</td>
<td>20%</td>
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<tr>
<td>Units 1-10 (even only) Section 1&amp;2</td>
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<tr>
<td>Test 1</td>
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<td>Units 11-21 (even only) Section 3&amp;4</td>
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<tr>
<td>Test 2</td>
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MIDLAND COLLEGE
SYLLABUS
MCHN 1320
PRECISION TOOLS AND MEASUREMENT
3-0

Total 100%

90 and above A
80 to 89 B
70 to 79 C
60 to 69 D
50 to 59 F

Course Schedule: This class meets for 3 lecture hours and 0 labs

SCANS Information: The following SCANS skills are taught and reinforced in this course:

READING:
Locates, understands and interprets written information in the manuals and documents published by construction governing bodies in order to perform task and judge accuracy and style

WRITTEN:
Maintains written notebook containing thoughts, ideas, information obtained from research and notes from lectures and demonstrations. Produces and maintains progress in order to keep accurate and complete track of his/her own progressing skills.

MATHEMATICS:
The students will perform basic computations, use basic numerical concepts in practical situations. They will approach practical problems by choosing appropriate mathematical techniques, use quantitative data to construct logical explanations for real world situations, and express mathematical ideas orally.

Administrative Information:

Curt Pervier, Division Chair Technical Studies
Lisa Hays, Technical Studies Division Secretary
(432) 685-4676
Fax: (432) 685-6472

Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor’s availability at a specific time.

*Syllabus subject to change as deemed necessary by the instructor to ensure learning objectives and course goals are met.
**Students with Disabilities:** Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester.

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. For further information on notice of non-discrimination, visit [http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm](http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm) or call 1 (800) 421-3481.

**Spanish**

Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. Para más información sobre estas políticas no discriminatorias, visite [http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm](http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm) o llame al 1 (800) 421-3481.