**UT Math 1330: Course Inventory in CEMS**

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| Course # | Math 1330 |
| Course Title | Trigonometry |
| Campuses (Main, Regional) | Main |
| Beginning Term (when is (was) it offered for the first time?) | Fall 1997 |
| Credit Hours (including the entire course, lecture/lab) | 3 |
| Co-/Pre-requisite | College Algebra or appropriate placement score. |
| Catalog Description | Definitions and graphs of trigonometric functions and their inverses, solving trigonometric equations, applications and topics in analytic geometry. |
| Textbook/Lab Manual | ISBN: 9781285562742  Title: Trigonometry - Bundle-Custom with Web Assign  Publisher: Brooks/Cole – Cengage Learning  Author: Ron Larson  Edition: 9th edition  Copyright Year: 2014  Additional Notes: |
| Outside Readings/Ancillary Materials/ Instructional Resources | Enhanced Web Assign |
| Instructional Goals or Objectives | The objective of this course is to develop your mathematical skills, with emphasis on problems requiring the use of trigonometric functions. Upon completion of the course, you should be able to:  1. Representation: Graphical, algebraic, numerical, and verbal representation of trigonometric and inverse trigonometric functions verbally, numerically, graphically and algebraically.  2. Definitions: Define the six trigonometric functions in terms of right triangles and the unit circle.  3. Graphs: Determine whether a trigonometric relation or given graph represents a function; perform transformations on graphs and operations with functions; determine intercepts, domain, range, intervals Fall 2010 of monotonicity, vertex of a quadratic, asymptotes, symmetry; and match graphs to trigonometric definitions.  4. Modeling: Use trigonometric and inverse functions to model a variety of real-world problem-solving applications.  5. Equations: Solve a variety of trigonometric and inverse trigonometric equations, in degrees and radians for both special and non-special angles; solve application problems  that involve such equations.  6. Triangles: Solve right and oblique triangles in degrees and radians for both special and non-special angles, and solve application problems that involve right and oblique triangles.  7. Identities: Verify trigonometric identities by algebraically manipulating trigonometric expressions using fundamental trigonometric identities, including the Pythagorean, sum and difference of angles, double-angle and half-angle identities.  8. Vectors: Represent vectors graphically in both rectangular and polar coordinates and understand the conceptual and notational difference between a vector and a point in the plane; perform basic vector operations both graphically and algebraically; solve application problems using vectors. |
| Description of Assessment and/or Evaluation of Student Learning | Quizzes and homework: 5-20%  3-4 Midterm exams: 50-70%  Comprehensive final exam: 25-30% |
| Additional Information |  |

Please attach syllabi (including co-/pre-requisite and current working and master syllabi for Transfer Module courses).