

CURRICULUM VITÆ

SUMMARY: Master Degree in Science (Mathematics) & Bachelor Degree in Science (Electronic Engineer) • 27 years of teaching experience • 5 years of Electronic Engineer experience • Significant programming experience in HTML, LaTeX, and familiar with many other computer languages and computer software • Languages Spanish, English.

EDUCATION:

Master of Science in Mathematics (1988-1990) : University of Texas at El Paso • El Paso, Texas.

Some graduate courses taken: Analysis of Several Variables, Complex Analysis, Finite Fields, Functional Analysis, General Topology, Number Theory, Numerical Analysis, Real Variables, Real Analysis, etc.

A total of 38 graduate credits in mathematics & 12 undergraduate credits in mathematics for a 3.52 GPA.

Bachelor of Science in EE (1980-1984) : Instituto Tecnológico De Chihuahua • Chihuahua, Chihuahua México.

Some courses taken: Analog Circuits, Control Theory, Digital Circuits, Design of Electronic Circuits, Electric & Electronic Measurements, Industrial Electronics, Physics Electronics, Electricity & Magnetism, Development's Digital Systems, Switching Power Supplies, Robotics, Radio Frequency Circuits Design, Worst Case Circuit Analysis, etc.

WORK HISTORY:

Full Time Lecturer (1998-Present) : University of Texas at El Paso • Courses taught: Calculus I; PreCalculus; Math for Social Sciences I & II in English and Spanish; Laboratory for Math for Social Sciences; College Algebra I & II in English and Spanish; Properties of Real Numbers I; Conceptual Mathematics II; Math Preparation for Placement Tests • I have taught 113 courses: 48 for Math Dept and 65 for Dev Math Program. In 109 courses my students received a set of notes as a daily lesson plan • I have participated in these projects or assignments:

- ✓ I designed and built a Web Site for my students. This site contains: hand-outs for each course I taught at UTEP, syllabi, practice exams, media tutorials and msexcel worksheets tutorials, formulae sheets, courses and office hours schedules, links to other math related web sites, home assignments, grades information, course objectives, etc. • 1999-2009.
- ✓ I participated in different Math Dept and Developmental Math meetings: creating exams, syllabi, schedules, additional aids for courses for the present semester and the following, reviewing and selecting textbooks for future courses • 1998-2009.
- ✓ I have contributed in selecting problems and administrating the exit exams for M1508, M1320, and M1411 using *Web Assign* site • 2008-2009.
- ✓ I translated the Math for Social Sciences, Introductory and Intermediate Algebra courses into Spanish. I have taught these bilingual courses for students from the *Inter-American Science & Humanities Program* since 2000 • 2000-2009.
- ✓ I designed and built the *Math for Social Sciences Web Site*. This site contains MSeExcel worksheets tutorials for all sections covered in the Math for Social Sciences Course • 2008-2009.
- ✓ I participated in the assessment plan for Math for Social Sciences creating questions for the final exams and formulae sheet for all Math for Social Sciences courses • 2009.
- ✓ I participated in the *University College Personnel Committee*, evaluating Developmental English and Math lectures • 2006-2007.
- ✓ I designed and built the *Developmental Mathematics Web Site*. This site contained general information for the developmental math program and math for social sciences courses: objectives, faculty & staff info, maps, syllabi, course schedules, practice exams, notes, multimedia, mathematics dictionary, mathematics procedures, links to other math tutorial web sites, etc. • 1998-2004.
- ✓ I participated in all assessment plans for the Math for Social Sciences Course creating random exams for all M1320 instructors • 2003.
- ✓ I reviewed the textbook: *Applied Calculus and Finite Mathematics*, 1st edition Houghton Mifflin Company • 2003.
- ✓ I headed the data collection and its analysis for the *Developmental Math Students Data Base Project* • 2002-2003.
- ✓ I participated in the *13th Annual International Conference on Technology in Collegiate Mathematics* • Atlanta, Georgia. Nov 2000.
- ✓ I translated into Spanish, and updated the placement exam for the *Inter-American Science & Humanities Program* • 1999-2000.
- ✓ I worked on the *Decentralized Class Scheduling System*, analyzing classrooms capacity and classes schedules data • 1999.
- ✓ I worked on the evaluation of the Developmental Math Program. For this, I created a computer program which keeps track of the academic performance for each student going through this program to the next math courses • 1998-1999.

Warranty Analysis Engineer : Altec Electrónica de Chihuahua, S.A. de C.V. • Product Engineering Office/Warranty Section (1993-1996) & Quality Office/Warranty Section (1996-1998) • A Visteon manufacturing plant which is a Ford Motor Co enterprise • I was responsible for this section, supervising three technicians, and was the leader of different quality meetings • I built a *warranty web site* to deliver better service to our customers, **it was the first of its type at Ford Motor Co. world wide** • I wrote computer programs, macros, to improve the capabilities of the system • There were four main responsibilities: Operatives, Analysis, Actions & Follow Up • I designed most of the warranty system for this plant; my estimations and general computations were used both at Altec and by different departments world wide in the Visteon company. The system was capable in detecting and giving follow up to warranty quality issues, until they were corrected and / or eliminated • This system was copied in part for different Ford-Visteon plants world wide • Chih, Chih. Mex. 1993-1998.

Full Time Instructor (1992) - Part Time Instructor (1991) : Instituto Tecnológico De Chihuahua • Courses taught: Differential and Integral Calculus; Vectorial Analysis; Linear Algebra; Differential Equations; Laplace Transforms; Fourier analysis • Chihuahua, Chih. Mex.

Part Time Instructor (1990-1992) : Universidad Autónoma de Chihuahua. Facultad de Ciencias Químicas • Courses taught: Differential and Integral Calculus; Vectorial Analysis; Linear Algebra; Differential Equations; Classical Mechanics (Dynamics) • Chihuahua, Chih. Mex.

Full Time Instructor (1985-1991) - Part Time Instructor (1985) : Instituto Tecnológico y de Estudios Superiores de Monterrey • Courses taught for the college students: Differential, and Integral Calculus; Electro-Magnetism; Classical Mechanics; Thermodynamics • Courses taught for the high school students: Calculus; Logic-Set Theory; Trigonometry; Algebra; Analytic Geometry; Thought Skills Development I, II, & III • Chihuahua, Chih. Mex.

Other Courses Taught and Conferences

- *Topics On Warranty Analysis* • Course taught to engineers from Visteon-Ford Motor Co and Tanashin de México • Chih, Chih. Mex. 2003, 1995, 1994, 1993; & Dearborn Michigan 1996.
- *The Special and General Theory of the Relativity* • Conference to professors from Instituto Tecnológico de Cuauhtémoc • Chihuahua, Chih. 1997.
- *Complex Variables* • Course taught to professors from Instituto Tecnológico de Chihuahua I • Chih, Chih. Mex. 1996.
- *The Special and General Theory of the Relativity* • Conference to professors from Instituto Tecnológico de Chihuahua • Chihuahua, Chih. Mex. 1996.
- *Computation and Numerical Methods I* • Course taught to professors from Instituto Tecnológico de Chihuahua II master degree program • Chihuahua, Chih. Mex. 1995.
- *The Special and General Theory of the Relativity* • Conference to engineers from Altec Electrónica de Chihuahua & Grupo Integra de Chihuahua Activo 20-30 Internacional • Chihuahua, Chih. 1995.
- *Number Theory* • Course taught to professors from Instituto Tecnológico de Chihuahua I & II • Chihuahua, Chih. Mex. 1994, 1992.

AWARDS, HONORS, OTHER RECOGNITIONS:

- First place in the “ *π Digits Number Contest*” I wrote down 200 correct digits in the 2006 contest, and 222 correct digits in the 2009 contest • The University of Texas at El Paso • Math. Dept. Club Zero • El Paso, TX 2006, 2009.
- Customer Driven Quality Award, world’s regional finalist • More than \$6’000,000.00 USD in savings for Ford Motor Co. Temperature Gauge Warranty Reduction Claims’ Project • Ford Motor Co. • Dearborn, MI. 1997.
- Customer Driven Quality Award, local recognition • Temperature Gauge warranty reduction claims • Ford Motor Co Chihuahua, Chih. Mex. 1997.
- Customer Driven Quality Award, local recognition • PN-96 Cluster warranty improvement Ford Motor Co • Chihuahua, Chih. Mex. 1997.
- Appointed best teacher by high school students • Instituto Tecnológico y de Estudios Superiores de Monterrey • Chihuahua, Chih. Mex. 1991.
- First place in *Local Engineering Mathematics Contest* • Instituto Tecnológico de Chihuahua • Chihuahua, Chih. 1983.
- Second place in *Local Engineering Physics Contest* • Instituto Tecnológico de Chihuahua • Chihuahua, Chih. 1983.
- Third place in *National Engineering Mathematics Contest* • Instituto Tecnológico de Orizaba • Orizaba, Ver. Mex. 1982.
- First place in *Regional Engineering Mathematics Contest* • Instituto Tecnológico de Durango • Durango, Dgo. Mex. 1982.
- First place in *Local Engineering Mathematics Contest* • Instituto Tecnológico de Chihuahua • Chihuahua, Chih. 1982.