

Randy K. Schwartz

PROFESSIONAL EMPLOYMENT

- 1984-present Schoolcraft College (Livonia, MI), Department of Mathematics
Professor of Mathematics, 1998-present
Department Chairman, 1994-1998
Assoc. Professor of Mathematics, 1992-1998
Asst. Professor of Mathematics, 1986-1992
Instructor of Mathematics, 1984-1986
- 1981-1984 Cleary College (Ypsilanti, MI), Department of Mathematics and Data Processing
Instructor of Mathematics and Data Processing
- 1979-1984 Washtenaw Community College (Ann Arbor, MI), Department of Mathematics
Part-time Instructor of Mathematics
- 1977-1979 Univ. of Michigan (Ann Arbor, MI), Department of Mathematics
Teaching Assistant in Mathematics
- Winter 1977 Dartmouth College (Hanover, NH), Department of Mathematics
Course Grader in Mathematics
- 1973-77 Logicon, Inc., Process Control Systems Division (Fairfax, VA)
Computer Programmer, Summers 1974-1977
Computer Operator, Summer 1973

INTERNSHIPS

- Summer 1972 Goddard Space Flight Center, NASA (Greenbelt, MD)
Research Participant, Network Tracking Programming Section
- Summer 1971 Smithsonian Institution (Washington, DC)
Research Aid, Computer History Project
Museum Guide, National Museum of History and Technology (later renamed National Museum of American History)

COURSEWORK

- Winter 2006 Oakland Univ. (Rochester Hills, MI)
History of Mathematics (Math 614) (4 credit hours)
- 1997-1999 Univ. of Michigan (Ann Arbor, MI)
Modern Standard Arabic (24 credit hours)
- Winter 1987 Schoolcraft College (Livonia, MI)
Macroeconomics 1 (Economics 201) (4 credit hours)
- 1977-1979 Univ. of Michigan (Ann Arbor, MI)
M.A. in mathematics, 1979
- 1974-1977 Dartmouth College (Hanover, NH)
B.A. in mathematics, 1977, *summa cum laude*; Highest Distinction in Mathematics

SELECTED SERVICE TO SCHOOLCRAFT COLLEGE

2003 – present	Member, Schoolcraft College International Institute (SCII); on informal Steering Committee since Jan. 2006
Dec. 2003 – present	Editor of <i>International Agenda</i> , semiannual newsletter of Schoolcraft College International Institute (SCII)
Dec. 2003 – Dec. 2004	Lead organizer of Speaker Series, Cairo Coffeehouse, and other facets of the Focus Middle East project (Schoolcraft College International Institute, SCII)
Sep. 25, 2014	Presentation at the dedication of Kehrl Auditorium (on the value of academic awards)
2012 – 2014	Member, Artifact Review Committee for the Core Ability, “Demonstrate Social and Cultural Awareness”
Jan. 13, 2006	Faculty Professional Development Day co-presenter, “Core Skills in the Disciplines: Activities We All Engage In!”. As one of eight faculty panelists, I spoke about how I have helped to integrate multicultural awareness into mathematics courses.
Jan. 3, 2003	Faculty Professional Development Day presenter, “Genius Knows No Borders: Teaching the Mathematics of Arab and Other Cultures”
Mar. 2002 – Apr. 2002	Schoolcraft College Physics Faculty Selection Committee
Dec. 1997 – Feb. 1998	Schoolcraft College Learning Assistance Center (LAC) Advanced Placement Workshops Committee
Nov. 1997 – Nov. 1998	Schoolcraft College Publications Committee
Aug. 26, 1997	Faculty Professional Development Day co-presenter, “Working Session for Assessment of General Education Goals”
Jan. 1997 – May 1997	Schoolcraft College Placement Testing Committee
Sep. 1996 – Apr. 1997	Schoolcraft College General Education Goals Assessment Committee
Feb. 1996 – May 1996	Schoolcraft College Mathematics Faculty Selection Committee
Apr. 1995 – 1995	Schoolcraft College Mathematics Faculty Selection Committee
Oct. 1994 – Apr. 1998	Schoolcraft College Curriculum Committee
Sep. 1990 – Apr. 1992	Schoolcraft College Pre-Needs Planning Committee
Apr. 1990 – Jun. 1990	Schoolcraft College Non-Developmental Mathematics Faculty Selection Committee
1986-89	Schoolcraft College Testing Committee
1985-92	Advisory Committee to Schoolcraft College Learning Assistance Center (LAC)

SELECTED SERVICE TO MATHEMATICS DEPT. AT SCHOOLCRAFT COLLEGE

1994 – present	Editor of <i>The Right Angle</i> , monthly newsletter of Mathematics Department
1996 – present	Mathematics Faculty Academic Scholarship Selection Committee
1996 – present	Pythagorean Prize Selection Committee
1997 – present	Displays organizer for Mathematics Department display case
Oct. 2018	Wrote the nomination of Prof. Lisa Zaccone for emeritus status (successful)
Oct. 2018	Wrote the nomination of Prof. Lois Bearden for emeritus status (successful)
Oct. 2014	Wrote the nomination of Prof. Janet Arsznov for emeritus status (successful)
Oct. 2010	Wrote the nomination of Prof. Linda Balfour for emeritus status (successful)
Nov. 2006	Wrote the nomination of Prof. Larry Williams for emeritus status (successful)
Oct. 1998	Wrote the nomination of Prof. Rodman Doll for emeritus status (successful)
Aug.-Oct. 2011	Member of committee to create display on history of Pythagorean Prize (Schoolcraft College Golden Gala 50 th anniversary celebration)
Apr. 2009 – present	Organizer of Math and Physics Club Speaker Series (two talks each year)
Sep. 2010 – present	Asst. Coach of Schoolcraft College Mathematics Team for semi-annual Student Math League Contest (American Mathematical Association of Two-Year Colleges)
Sep. 2010 – present	Asst. Faculty Advisor for Math and Physics Club
1985-90, 2008-10	Coach of Schoolcraft College Mathematics Team for semi-annual Student Math League Contest (American Mathematical Association of Two-Year Colleges)
Feb. 2008 – May 2010	Faculty Advisor for Math and Physics Club
Jan. 31, 2006 – Aug. 30, 2006	Statistics Textbook Selection Committee (Math 122) (Chair)
Mar. 1, 2003 – Apr. 24, 2003	PreCalculus Textbook Selection Committee (Math 128)
Sep. 2000 – Mar. 2002	Committee to Create Math 113 (Intermediate Algebra) and Exit Test
Jan. 1998 – present	Mathematics Department liaison to Mathematical Association of America (MAA)
Oct. 1997 – Sep. 1998	Faculty Forum senator (Mathematics Dept. representative)

Oct. 1996 – Jun. 1998	Business Calculus Curriculum and Textbook Committee (Math 128, 145)
Oct. 1994 – Apr. 1995	Calculus Textbook Selection Committee (Math 150, 151, 240)
Aug. 1994 – Apr. 1998	Mathematics Department Chair
Nov. 21, 1992	Presenter of professional development seminar, “Manipulating Data with the TI-81 Graphing Calculator”
Mar. 1991 – Jun. 1991	Precalculus Textbook Selection Committee (Math 128)
May 27, 1986	Co-presenter of “Introduction to Computers”, a professional development seminar for the Mathematics Department (with Ed Kavanaugh)
Apr. 1985 – Oct. 1985	Linear Algebra Textbook Selection Committee (Math 230)
Apr. 1985 – Aug. 1985	Calculus Textbook Selection Committee (Math 150, 151, 240)
Jan. 1985 – Mar. 1985	Precalculus Review Committee (Math 129)

COURSES TAUGHT AT SCHOOLCRAFT COLLEGE

Math 45	Basic Mathematics
Math 119	Trigonometry
Math 122	Elementary Statistics
Math 128 (now 126)	College Algebra
Math 135	Finite Mathematics
Math 145	Calculus for Business and Social Science
Math 150	Calculus 1
Math 151	Calculus 2
Math 211	Computer Programming with FORTRAN
Math 230	Linear Algebra
Math 240	Calculus 3
Math 252	Differential Equations

SELECTED SERVICE TO DISCIPLINE

Jan. 1, 2014 – present	Associate Editor and Member of Editorial Board of <i>Convergence</i> , an online journal of the Mathematical Association of America (MAA)
2012 – present	Create the solution sheet for national director of semi-annual Student Math League Contest (American Mathematical Association of Two-Year Colleges)
Fall 2013	Created “Mathematics of Planet Earth: Problems for Students” for an international initiative, Year of Mathematics of Planet Earth (2013)
2006-8, 2012-13, 2015-19	Volunteer grader for Michigan Mathematics Prize Competition, Part II (one Saturday each January)
Jan. 1998 – present	Campus representative, Mathematical Association of America (MAA)

SELECTED PUBLICATIONS

- Randy K. Schwartz, “A Classic from China: The Nine Chapters”, *Convergence* (MAA), Vol. 15 (December 2018).
- Randy K. Schwartz, “Ibn al-Haytham Extended: Spherical Optics in al-Mu’taman and Harriot”, *Actes du Douzième Colloque Maghrébin sur l’Histoire des Mathématiques Arabes, Marrakech, 26 au 28 Mai 2016* (Marrakech, Morocco: École Normale Supérieure, Université Cadi Ayyad, 2018), pp. 251-265.
- Randy K. Schwartz and Frank J. Swetz, “Mathematical Treasure: The Method of the Scales in Ibn al-Hā’im’s ‘Book of Delights’”, *Convergence* (MAA), Vol. 14 (May 2017).
- Randy K. Schwartz, “The Battle Against Malaria: A Teachable Moment”, *Journal of Humanistic Mathematics*, 7:1 (Feb. 2017), pp. 204-228.
- Randy K. Schwartz, “How Combinatorics Sheds Light on Polynomial Roots”, *MathAMATYC Educator*, 6:2 (February 2015), pp. 15-16.

- Randy K. Schwartz, “‘He Advanced Him 200 Lambs of Gold’: The Pamiers Manuscript”, *Convergence* (MAA), Vol. 9 (July 2012).
- Randy K. Schwartz, “Adapting the Medieval ‘Rule of Double False Position’ to the Modern Classroom”, Chapter 5 (pp. 29-37) in Dick Jardine and Amy Shell-Gellasch (eds.), *Mathematical Time Capsules: Historical Modules for the Mathematics Classroom*, MAA Notes series (Washington, DC: Mathematical Association of America, 2011).
- Randy K. Schwartz, “Combining Strands of Many Colors: Episodes from Medieval Islam for the Mathematics Classroom”, *Convergence* (MAA), Vol. 7 (August 2010).
- Randy K. Schwartz, “The Birth of the Meter”, *Math Horizons*, 16:1 (Sep. 2008), pp. 14-17, 31.
- Randy K. Schwartz, “Issues in the Origin and Development of *Hisāb al-Khatā’ayn* (Calculation by Double False Position)”, *Actes du Huitième Colloque Maghrébin sur l’Histoire des Mathématiques Arabes, Tunis, les 18-19-20 Décembre 2004* (Tunis: Tunisian Association of Mathematical Sciences, 2006), pp. 275-296.
- Randy K. Schwartz and Rheta N. Rubenstein, “The Bows and Arrows of Trigonometry”, *Math Horizons*, 14:1 (Sep. 2006), pp. 26-27.
- Randy K. Schwartz, “Introducing Historical Arab Mathematics to a Two-Year College in the United States”, *Actes du Septième Colloque Maghrébin sur l’Histoire des Mathématiques Arabes, Marrakech, 30 Mai – 1 Juin 2002* (Marrakech: École Normale Supérieure, 2005), Vol. 2, pp. 177-190.
- Randy K. Schwartz, “Report on COMHISMA8 in Tunisia”, *HPM Newsletter* (International Study Group on the Relations Between the History and Pedagogy of Mathematics), 58 (Mar. 2005), pp. 12-15.
- Randy K. Schwartz and Josselyn Moore, “Middle East Theme at Schoolcraft”, *Midwest Connections* [newsletter of the Midwest Institute for International/ Intercultural Education, Kalamazoo, MI], Spring 2004, p. 2.
- Randy K. Schwartz, “Embracing Arab and Other Cultures in the Mathematics Classroom”, *Equal Opportunity in Mathematics Committee Newsletter* (American Mathematical Association of Two-Year Colleges), Nov. 2003, pp. 4-6.
- Randy K. Schwartz and Rheta N. Rubenstein, “Circles: Around, About, Across, & Through”, *Math Horizons*, 11:2 (Nov. 2003), pp. 20-23.
- Randy K. Schwartz and Rheta N. Rubenstein, “Functioning Meaningfully”, *Math Horizons* 10:2 (Nov. 2002), pp.27-29.
- Randy K. Schwartz and Rheta N. Rubenstein, “Another Verse, Changed from the First”, *Math Horizons*, 9:2 (Nov. 2001), pp. 26-28.
- Randy K. Schwartz, “Unity in Multiplicity: Lessons from the Alhambra”, *Newsletter of the Michigan Section of the Mathematical Association of America* (Fall 2001), pp. 7-11.
- Randy K. Schwartz, “Unity in Multiplicity: Lessons from the Alhambra”, *Thought and Action* [a journal of the National Education Assn.], 17:1 (Summer 2001), pp. 63-75.
- Randy K. Schwartz and Rheta N. Rubenstein, “Conics: The Truth, The Whole Truth, and Nothing But”, *Math Horizons*, 8:4 (Apr. 2001), pp.23-26.
- Randy K. Schwartz and Rheta N. Rubenstein, “Word Histories: Melding Mathematics and Meaning”, *Mathematics Teacher*, 93:8 (Nov. 2000), pp. 664-669.
- Randy K. Schwartz and Rheta N. Rubenstein, “The Duplicity of Two”, *Math Horizons* 7:4 (Apr. 2000), pp. 25-28.
- Randy K. Schwartz and Rheta N. Rubenstein, “Arabic from A (Algebra) to Z (Zero)”, *Math Horizons*, 7:1 (Sep. 1999), pp. 16-18.
- Randy K. Schwartz and Rheta N. Rubenstein, “The Roots of the Branches of Mathematics”, *Math Horizons*, 6:3 (Feb. 1999), pp.18-20; reprinted in Deanna Haunsperger and Stephen Kennedy, eds., *The Edge of the Universe: Celebrating Ten Years of Math Horizons* (Washington, D.C.: Mathematical Association of America, 2006), pp. 105-107.
- Randy K. Schwartz and Steven Boettcher, “Planning a Departmental Forum: Using a Newsletter or a Web Site to Energize Your Department”, *Michigan Community College Journal* [later renamed *The Community College Enterprise*] 4:1 (Spring 1998), pp. 59-68.
- Randy K. Schwartz, “Team-Building Through Technology: Using a Newsletter or a Web Site to Energize Your Department”, *Proceedings of the Seventh International Conference for Community and Technical College Chairs, Deans, and Academic Leaders (National Community College Chair Academy [NCCCA])*, Houston, TX, Feb. 1998.
- Randy K. Schwartz and Steven Boettcher, “Team-Building Through Technology: Using a Newsletter or a Web Site to Energize Your Department”, *Proceedings of the Sixth International Conference for Community and Technical College Chairs, Deans, and Academic Leaders (National Community College Chair Academy [NCCCA])*, Reno, NV, Feb. 1997.
- Randy K. Schwartz, “Teaching Students with Learning Disabilities”, *Focus* (newsletter of the Mathematical Association of America [MAA]) 17:4 (Aug. 1997), pp. 12-14.
- Randy K. Schwartz, “Patrolling the Empire: Mapping, Imagery and National Security”, *Covert Action Quarterly*, 59 (Winter 1996-97), pp. 32-37.
- Randy K. Schwartz, *Test Bank to Accompany Elementary Linear Algebra*, 1994, 2000 (John Wiley and Sons, Inc.).

SELECTED PRESENTATIONS

- Aug. 6, 2016 “A Volume Optimization by Sharaf al-Dīn al-Ṭūsī”, MathFest 2016, the Summer Conference of Mathematical Association of America (MAA), Columbus, OH.
- May 26, 2016 “Ibn al-Haytham Extended: Spherical Optics in al-Mu’taman and Harriot”, at the 12th Maghreb Symposium on the History of Arabic Mathematics (COMHISMA12), Cadi Ayyad Univ., Marrakech, Morocco.
- Apr. 15, 2016 “A Solid Problem for Calculus from Sharaf al-Dīn al-Ṭūsī”, 23rd Annual Conference of the Midwest Institute for International and Intercultural Education (MIIE), Schoolcraft College, Livonia, MI.
- Apr. 2, 2014 “Islam & Mathematics: A Hidden History,” Macomb Community College (South Campus), part of a series funded by a grant, “Let’s Talk About It: Muslim Journeys” (National Endowment for the Humanities and American Library Association).
- Dec. 2, 2010 “Islam and Mathematics: A Hidden History”, sponsored by Thaqaalayn Muslim Association, Univ. of Michigan-Dearborn, Dearborn, MI.
- Nov. 2, 2010 “Islam and Mathematics: A Hidden History”, part of the Speaker Series for the Focus Middle East project, International Institute, Schoolcraft College, Livonia, MI. Co-sponsored by Math and Physics Club.
- May 31, 2010 “*Al-qibla* and the New Spherical Trigonometry: The Examples of al-Bīrūnī and al-Marrākushī”, Tenth Maghrebian Colloquium on the History of Arabic Mathematics (COMHISMA10), Tunis, Tunisia.
- Aug. 7, 2009 “Silk Threads of Many Colors: Teaching Ibn Mun’im’s Combinatorics”, part of the Contributed Paper Session on “The History and Philosophy of Mathematics, and Their Uses in the Classroom”, MathFest 2009, the Summer Conference of Mathematical Association of America (MAA), Portland, OR.
- Apr. 21, 2006 “Welcoming Arab Culture in the Mathematics Classroom”, 13th Annual Conference of the Midwest Institute for International/ Intercultural Education (MIIE), Schoolcraft College, Livonia, MI.
- Dec. 19, 2004 “Issues in the Origin and Development of *Hisāb al-Khatā’ayn* (Calculation by Double False Position)”, Eighth Maghrebian Colloquium on the History of Arabic Mathematics (COMHISMA8), Tunis, Tunisia.
- Jan. 29, 2004 “Islam and Mathematics: A Hidden History”, part of the Speaker Series for the Focus Middle East project, International Institute, Schoolcraft College, Livonia, MI.
- Jan. 3, 2003 “Genius Knows No Borders: Teaching the Mathematics of Arab and Other Cultures”, Faculty Professional Development Day, Schoolcraft College, Livonia, MI.
- Oct. 5, 2002 “Making Historical Arab Mathematics Come Alive”, Eighteenth Fall Conference of Michigan Mathematical Association of Two-Year Colleges (MichMATYC), Monroe County Community College, Monroe, MI.
- May 31, 2002 “Introducing Historical Arab Mathematics to a Two-Year College in the United States”, Seventh Maghrebian Colloquium on the History of Arabic Mathematics (COMHISMA7), Marrakech, Morocco.
- Apr. 21, 2001 “Unity in Multiplicity: Lessons from the Alhambra”, Eighth Annual Conference of the Midwest Institute for International/ Intercultural Education (MIIE), Kalamazoo Valley Community College, Kalamazoo, MI.
- Mar. 4, 2001 “Unity in Multiplicity: Lessons from the Alhambra”, National Education Association (NEA) Higher Education Conference, San Diego, CA.
- Feb. 28, 1998 “Team-Building Through Technology: Using a Newsletter or a Web Site to Energize Your Department”, Seventh International Conference for Community and Technical College Chairs, Deans, and Academic Leaders (National Community College Chair Academy [NCCCA]), Houston, TX.
- Feb. 7, 1998 Co-presenter with Rheta Rubenstein, “Angles and Ankles: How Can Mathematics Word Origins Help Students?”, 48th Annual Mathematics Education Conference, Univ. of Michigan, Ann Arbor, MI.
- Feb. 15, 1997 Co-presenter with Steven Boettcher, “Team-Building Through Technology: Using a Newsletter or a Web Site to Energize Your Department”, Sixth International Conference for Community and Technical College Chairs, Deans, and Academic Leaders (National Community College Chair Academy [NCCCA]), Reno, NV.
- Oct. 6, 1996 “Deciding How Often to Air Commercials at a Radio Station”, Twelfth Fall Conference of Michigan Mathematical Association of Two-Year Colleges (MichMATYC), Jackson Community College, Jackson, MI.
- Oct. 14, 1995 “Lines of Force of the Earth’s Magnetic Field”, Eleventh Fall Conference of Michigan Mathematical Association of Two-Year Colleges (MichMATYC), Schoolcraft College, Livonia, MI.
- Jun. 24, 1994 “Matrix Power Series: Another Bridge from Calculus to Linear Algebra”, Third Annual Conference on the Teaching of Calculus, Univ. of Michigan, Ann Arbor, MI (sponsored by Calculus Consortium at Harvard and Wiley Publishing).

PROFESSIONAL AFFILIATIONS

2005-present	Commission on the History of Science and Technology in Islamic Societies (CHOSTIS)
2002-present	MAA Special Interest Group on the History of Mathematics (HOMSIGMAA)
1984-present	Mathematical Association of America (MAA)
1980-present	American Mathematical Society (AMS)
1985-present	American Association for the Advancement of Science (AAAS)
1985-2002	Association for Computing Machinery (ACM)
1984-present	National Education Association (NEA)
1977-present	Phi Beta Kappa Society

GRANTS RECEIVED

2017-18	“ <i>International Agenda: Student and Community Involvement</i> ”: a grant of \$1500 from the Schoolcraft College Foundation for measures to enhance student contributions to <i>International Agenda</i> and to expand the reach of the magazine into the surrounding community.
2016-17	“ <i>International Agenda: Student and Community Involvement</i> ”: a grant of \$1600 from the Schoolcraft College Foundation for measures to enhance student contributions to <i>International Agenda</i> and to expand the reach of the magazine into the surrounding community.
2015-16	“ <i>International Agenda: Student and Community Involvement</i> ”: a grant of \$1825 from the Schoolcraft College Foundation for measures to enhance student contributions to <i>International Agenda</i> and to expand the reach of the magazine into the surrounding community.
2014-15	“ <i>International Agenda: Student and Community Involvement</i> ”: a grant of \$2325 from the Schoolcraft College Foundation for measures to enhance student contributions to <i>International Agenda</i> and to expand the reach of the magazine into the surrounding community.
2013-14	“ <i>International Agenda: Student and Community Involvement</i> ”: a grant of \$2255 from the Schoolcraft College Foundation for measures to enhance student contributions to <i>International Agenda</i> and to expand the reach of the magazine into the surrounding community.
2012-13	“ <i>International Agenda: Student and Community Involvement</i> ”: a grant of \$2150 from the Schoolcraft College Foundation for measures to enhance student contributions to <i>International Agenda</i> and to expand the reach of the magazine into the surrounding community.
2004	A grant of \$2150 from the Schoolcraft College Foundation to attend, and make a presentation at, the Eighth Maghrebian Colloquium on the History of Arab Mathematics (COMHISMA8), Radès, Tunisia, Dec. 18-20, 2004.

SELECTED HONORS AND AWARDS

2018	Schoolcraft College Presidential Recognition Award
2011	Nominated for a Pushcart Prize for the poem, “Reading Steinbeck Aloud in the Rain” in <i>EDGE</i> (South Lake Tahoe, CA), Vol. 5 (2011), p. 62.
2009	Trevor Evans Award, Mathematical Association of America (MAA), for the article “The Birth of the Meter” (\$250 prize)
2005	Schoolcraft College Presidential Recognition Award
2005	Peace Award from the Season for Nonviolence Committee (Schoolcraft College) “for your incredible work through the Schoolcraft College International Institute. Your efforts to educate the Schoolcraft community about the Middle East and now Latin America and to put a human face on those whom some would see as the enemy has significantly helped the cause of peace through understanding.”
2004	Schoolcraft College Presidential Recognition Award (to entire Department of Mathematics)
2004	NISOD Excellence Award (National Institute for Staff and Organizational Development, Univ. of Texas, Austin)
2000	Democracy in Higher Education Prize, National Education Association (NEA), for the essay “Unity in Multiplicity: Lessons from the Alhambra” (\$2500 prize)
1988	Schoolcraft College Presidential Recognition Award (to entire Department of Mathematics)
1977	Induction into Phi Beta Kappa.