

Curriculum Vitae of Stephen G. Saupe

Office Address:

St. John's University/College of St. Benedict
Department of Biology
Collegeville, MN 56321
(320) 363-2782; (320)363-3202 (Fax)
email: ssaupe@csbsju.edu
home page: www.employees.csbsju.edu/ssaupe

Education:

Ph.D. Botany - *University of Illinois*, Urbana-Champaign, Illinois, 1981
M.S. Botany - *University of Illinois*, Urbana-Champaign, Illinois, 1977
B.S. Biology, *cum laude* - *Lynchburg College*, Lynchburg, Virginia, 1975

Current Position:

Professor of Biology - College of St. Benedict, St. Joseph, MN - *joint department with St. John's University, Collegeville, MN* (Fall 1981 - present)

Grant Support: (*since 2000*)

- ❖ "All Taxa Biological Inventory in Central Minnesota," for \$311,000 to LCCMR program of the MN Department of Natural Resources. Although unsuccessful, the grant made it past the first round of reviews and was granted a public hearing in St. Paul. Fall 2007
 - ❖ "Revision of the Introductory Biology Curriculum" - CSB/SJU Curriculum & Program Development Grant, \$13, 000 (Summer 2005).
 - ❖ "Proposal to Sample Pollen at St. John's." Rooney Foundation, St. John's. Summer 2004. Funded.
 - ❖ "Forestry at St. John's." Grant to the Laird-Norton Foundation (\$14,000) for the St. John's Arboretum (with Tom Kroll & Derek Larson.)
-

Publications:

- ❖ **Saupe, S.G.** 2008. "The Lusty Spring Wildflowers." *Sagatagan Seasons*, volume 11 (2): 1 & 5 (Spring)
- ❖ **Saupe, S.G.** 2008. "Plant Science Alliance at CSB/SJU," *CSB/SJU Biology Newsletter* (11) 3: 1 (Spring)
- ❖ **Saupe, S.G.** 2007. "It takes a village." *Sagatagan Seasons* 10 (1): 4 (Winter)
- ❖ **Saupe, S.G.** & P Melchior (submitted, summer 2007) "The floral charms of St. John's: A Survey of Botanical Communities," contributed to *Understanding Home*, a volume produced by the

CSB/SJU Environmental Studies program (E Diedrich, ed).

- ❖ **Saupe, S.G.** 2007. Pollen image (*Juniperus*) published by *The Philadelphia Inquirer* newspaper, March 12, 2007.
- ❖ **Saupe, S.G.** & KE Sharpless. 2007. "The Doctrine of Signatures Challenge." *Analytical and Bioanalytical Chemistry* 389 (1): 3 - 9. Published online, Tuesday, July 24, 2007.
- ❖ **Saupe, S.G.** 2007. Letter to the editor, "Understanding diffusion," in the *American Biology Teacher* 70 (1): 10 (January, 2008)
- ❖ **Saupe, S.G.** 2007. "Sugar Shack Renovation Begins" in *Sagatanan Seasons* (Fall)
- ❖ **Saupe, S.G.** 2006. "Snow White and the Winter Wake-up Call." *Sagatanan Seasons* 9: 3 (Winter)
- ❖ **Saupe, S.G.** 2006. Bibliography of articles about the St. John's Maple Syrup Operation. On-line at: http://www.employees.csbsju.edu/ssaupe/essays/maple_bibliography.htm
- ❖ **Saupe, S.G.** 2006. Making maple syrup at St. John's: Records show shifts in the 'Sticky Business.'" *Headwaters. A CSB/SJU Faculty Journal* 23: 25 - 38.
- ❖ **Saupe, S.G.** 2006. Does sap flow better during Holy Week? *Maple Syrup Digest*, 18A (3): 29 - 33. Saupe, S.G. 2006. "Maple syrup is not just about pancakes." *Quandong* 32 (3): 16 - 18.
- ❖ **Saupe, S.G.** 2006. "Maple syrup: St. John's Sweetest Springtime tradition," submitted to to Understanding Home, a volume produced by the CSB/SJU Environmental Studies program (E Diedrich, ed).
- ❖ **Saupe, S.G.** 2006. Orchids in the arboretum. *Sagatanan Seasons* 9 (4): 3 & 6 (Autumn).
- ❖ **Saupe, S.G.** 2005. "Maple Sugar Time." CSB/SJU Monday morning postcard, March 14. Posted at: www.csbsju.edu/alum/intouch/postcards/saupe.htm.
- ❖ **Saupe, S.G.** 2005. "The Maple Syrup Crystal Ball" *Sagatanan Seasons* 8: 4 (Spring).
- ❖ **Saupe, S.G.** 2005. Photograph (maple syrup collecting) published; Abbey Banner Vol 5 (2): 19.
- ❖ Scott, C. Eugenia, *et al.* 2004. "The morphology of Steve." *Annals of Improbable Research*, July-August. Cited as a coauthor for tongue-in-cheek article published as part of Project Steve sponsored by the National Center for Science Education.
- ❖ **Saupe, S.G.** 2004. "How do they do it?" *Sagatanan Seasons* 7 (1). Winter.
- ❖ **Saupe, S.G.** 2004. Pollen image published by *The Texas Statesman* newspaper, Austin (Spring).
- ❖ **Saupe, S.G.** 2004. "The Refectory Guardian." *Sagatanan Seasons* 7: 6 (Autumn).
- ❖ **Saupe, S.G.** & J. Arriagada. 2004. "Botanical Report: Plum Creek Regional Park" - unpublished report prepared for the City of St. Cloud (MN).

- ❖ **Saupe, S.G.** 2003. "Buckthorn is my favorite plant. Not!" *Sagatanan Seasons* Vol 6 (3). November
- ❖ **Saupe, S.G.** 2001. "Winterberry: A Plant for the Holly-Days." *Sagatanan Seasons* Vol 3 (4). Winter.
- ❖ **Saupe, S.G.** 2002. "The origin of the Halloween Jack O'Lantern". *Symposium* 19: 112 - 122.
- ❖ **Saupe, S.G.** 2002. "Parasites for Christmas." *Sagatanan Seasons* Winter
- ❖ **Saupe, S.G.** 2002. Three photographs published in *Sagatanan Seasons* Vol 5 (2). Summer.
- ❖ **Saupe, S.G.** 2000. The Biology Herbarium. *Sagatanan Seasons* Vol 2 (4). Winter
- ❖ **Saupe, S.G.** 2000. "The Biology Department - A Walking Tour." Guide written for the CSB/SJU Admissions Department.
- ❖ **Saupe, S.G.** 1998. Fall colors. *Sagatanan Seasons* Vol 1 (4). Autumn.
- ❖ Hoff, J., **S.G. Saupe** and M. Handahl. 1996. A Quarry Park Primer. Self-published.
- ❖ **Saupe, S.G.** 1996. Morality in the Herbarium. *Herbarium News*.
- ❖ **Saupe, S.G.** 1986. Review of the book, Of Plants and People by C.B. Heiser, Jr.; *American Biology Teacher* 48: 504.
- ❖ **Saupe, S.G.** and G. Donnermeyer, eds. 1984. *Readings in the Life Sciences*. Ginn Custom Publishing. Lexington, MA.
- ❖ **Saupe, S.G.** 1982. Significance in test-taking time. *Cable* 6:(8): 3. (letter to the editor).
- ❖ Seigler, D.S., **S.G. Saupe**, D.A. Young, P.M. Richardson, B.B. Simpson and J.L. Neff. 1982. *Acacia rigidula* - a new ant-acacia. *Southwestern Naturalist* 27: 364-365.
- ❖ **Saupe, S.G.**, D.S. Seigler and J. Escalante-Semerena. 1982. Bacterial contamination as a cause of spurious cyanide tests. *Phytochemistry* 21: 2111-2112.
- ❖ **Saupe, S.G.** 1981. Cyanogenesis and angiosperm phylogeny. Pp. 80-116. In *Phytochemistry and Angiosperm Phylogeny*. (Younng, D.A. and D.S. Seigler, eds.) Praeger Press, NY.
- ❖ **Saupe, S.G.** 1981. Occurrence of psilocybin/psilocin in *Pluteus salicinus* (Pluteaceae). *Mycologia* 73: 781-784.
- ❖ Seigler, D.S., **S.G. Saupe** and L.M. Blehm. 1980. The origin of cyanolipids in *Ungnadia speciosa*. *Rev. Latinoamer. Quim.* 11: 137-139.
- ❖ Boyer, J.S., R.R. Johnson and **S.G. Saupe**. 1980. Afternoon water deficits and grain yields in new and old soybean cultivars. *Agronomy Journal* 72: 981-986.

Invited Presentations:

- ❖ “Edible Wild Plants” – presented to the Wright County (MN) Historical Society (May 2007), and Friends of Lake Maria State Park (May 2005)
- ❖ “Spring wildflowers” – presented to the Friends of Lake Maria State Park (May 2008), and Stearns County Horticultural Society (March 2008)
- ❖ “Weird and Wonderful Flora of Australia” – presented to the Stearns County Horticultural Society (April 2008), and Central Minnesota Audubon Society (September 2008)
- ❖ "Do you know what's in the air you breathe? An investigation of airborne pollen and mold spores in Central Minnesota." presented to the Luther College Biology Department, March 2007.
- ❖ "Central Minnesota Wildflowers" - presented at the "Woodlands as Resources" conference, St. John's University; Sept 2006.
- ❖ "Maple syrup: A sweet springtime tradition" - presented at the "Woodlands as Resources" conference, St. John's University; Sept 2006.
- ❖ "The Natural History of Maple Syrup Production...or, There's more to maple syrup than pancakes." - Presentation to the Royal Society of Western Australia, Perth (Western Australia); May 2006.
- ❖ "The St. John's Maple Syrup Operation: A Sweet Benedictine Tradition" - CSB/SJU Collegial Conversation presentation, Sept 2005.
- ❖ "Natural History of Maple Syrup Production: The St. John's Experience" - presentation for the conference Shaping the Future of the Avon Hills, St. John's University (April 2005).
- ❖ "Prairie Restoration at St. John's" - presentation for the Tri-State Master Gardeners Conference (June 2004).
- ❖ "The Textbook Flower: A Rare Beast," presentation to the Stearns County Horticulture Society, September 2003).
- ❖ "Plant Families for Gardeners" - presentation for the Tri-State Master Gardeners Conference (June 2004).
- ❖ “From Bloodroot to Trillium: The Biology of Spring Wildflowers" - presentation at Kirkwood Community College, Cedar Rapids (IA). March 2003. This seminar was also presented to the CSB/SJU Biology Department (Sept 2003), St. Cloud State University Biology Department (April 2004) and John Curtin University (Perth, Western Australia; Spring 2006).
- ❖ "Natural History of Woodland Wildflowers" - presentation to the CSB/SJU Biology Department (Sept 2004). "Field Identification of Wildflowers" - presentation at the Woodland Owners and Users Conference, October 2003.
- ❖ "The Biology of Resurrection: Life after Death in Fungi" – presented at the University of Minnesota Lake Itasca Biological Field Station (Summer 2003). Also presented to College of St.

Benedict Faculty Development Series (April 1991), Victoria University, Ecology Seminar Series (April 1996)

- ❖ "Evolutionary Stories from New Zealand" – presented at the University of Minnesota Lake Itasca Biological Station (Summer 2001) and CSB/SJU Collegial Conversation Series (Apr 1997)
- ❖ "South Africa" - presentation given to 2001 Study Abroad Group (Fall 2000)
- ❖ "Plant Taxonomy Primer" - Stearns County Horticultural Society (Jan 1999)
- ❖ "A Botanist Loose in New Zealand" - CSB/SJU Biology Department (Nov 1996)
- ❖ "Natural History of New Zealand" - Central Minnesota Audubon Society (Sept 1997) & Wild Bird Crossing (Oct 1996).
- ❖ "A Look at Hydroponics" - St. Cloud Garden Club, April 1995.
- ❖ "A Mushroom Primer for Gardeners" - Minnesota State Master Gardener Conference, St. Cloud, MN, April 1994. "Wild Mushrooms." Presented to Stearns County Historical Society (Sept. 1993) and Central Minnesota Audubon Society (Sept. 93).
- ❖ "The Biology of Overpopulation." Presentation for a panel discussion concerning the role of church and society in curbing population growth. College of St. Benedict/St. John's University Biology Club. April 1991.
- ❖ "Cyanogenesis in microorganisms." Presented to Mycology Seminar Group, University of California - Davis, May 1989.

Contributed Papers:

- ❖ "Airborne pollen and mold spores during the winter months in central Minnesota (USA)" - poster presented at the Pan-American Aerobiology Association Conference, State College, Pennsylvania (June 2007). With A Soutar & J Turtle.
- ❖ "Airborne pollen and mold spores in central Minnesota" - poster presented at the Pan-American Aerobiology Association Conference, Tulsa (OK; June 2005)
- ❖ "Effect of Exotic Earthworms on Soil Properties in the St. John's Arboretum" - poster presented at the meeting of the MN Chapter of Conservation Society of America (B Rith-Najarian, primary author; Mar 2005).
- ❖ "The Natural History of St. John's Maple Syrup," Presented to the CSB/SJU Friday Forum, March 2003 (with John Geissler).
- ❖ "The CSB/SJU Bailey Herbarium: Botanical Tales from the Crypt," Presented to the CSB/SJU Friday Forum, March 2003.
- ❖ "The South Africa Study Abroad Program: What really happened." - CSB/SJU Biology Department Seminar (Jan 2000)

- ❖ "Cliffs, Castles and Currachs: A Look at Ireland." Slide-tape presentation. College of St. Benedict/St. John's University Biology Club (March 1991); College of St. Benedict Symposium class (April 1991); and Irish Studies Orientation Program (May 1993).
- ❖ "Halloween Botany: Pumpkins, turnip and ergot." College of St. Benedict/St. John's University Biology Club, Oct. 1993.

Professional Service: (since 2000)

- ❖ Consultant – two MS students from St. Cloud State University, Fall 2008
- ❖ Consultant - fungal spore identification for MicroBioLogics, St. Cloud (June 2007)
- ❖ Interviewed about fall leaf color for a “Jetstreaming” podcast hosted by Cathy Wurzer, Morning Edition host, Minnesota Public Radio (Sept 4, 2008) at URL: http://download.publicradio.org/podcast/minnesota/podcasts/jet_streaming/2007/04_jetstreaming_64.mp3. Also interviewed on-air interview by JG Preston, WJON radio (Oct 2001) on same topic.
- ❖ DNR Commissioner’s Advisory Committee (CAC) for the Scientific and Natural Area program (SNA; 2006 – present)
- ❖ Host - Visitors from Russia to the CSB/SJU Bailey Herbarium (May 2008)
- ❖ Provided botanical images: University of Florida study group (Fall 2005), Education department of Western Australia (Spring 2006)
- ❖ Manuscript reviewer: *Journal of Arid Environments* (Mar 2002); *American Biology Teacher* (June 1996, May 1998, Spring 1999, Nov 1999, Fall 1999, Fall 2001, Spring 2002, Fall 2002, July 2003; May 2008); *USDA Forest Service Publication* (Summer 2004); *Pollen Journal* (Sept 2004); *Plant Physiology and Biochemistry* (Dec 2004) ; *Cactus Journal* (Spring 2008)
- ❖ Textbook Reviewer - *Plant Systematics* textbook for Elsevier Press (Nov 2004); *Plant Physiology* textbook for Pearson/Benjamin Cummings (Sept 2005).
- ❖ Chief Botanist - BioBlitz - Mississippi River County Park (Sept 2005)
- ❖ MS Thesis Committee - student from St. Cloud State University, Fall 2005.
- ❖ "Tree Walk" - for the Stearns County Master Gardeners, July 2003.
- ❖ Woodland Owners & Users Conference - St. John's University. Organizer (Fall 2003).
- ❖ Central Minnesota Herbarium Partnership - developed with St. Cloud State University Herbarium (Spring 2001)
- ❖ Botanical pseudoscience expert - interviewed for article that appeared in Spa Magazine (Jan 2001)

- ❖ Tour Guide - Quarry Park for a field trip of the Minnesota Native Plant Society (Summer 2001)
- ❖ Host - campus host for annual meeting of the North American Mycological Society (Summer 2001)
- ❖ Internet consultant to countless individuals who contacted me with botanical inquiries as the result of reading my web site (through present)

Professional Meetings Attended (*listed alphabetically; since 2000*):

- ❖ Bio-Forum: Teaching in the New Millennium - University of Minnesota, St. Paul (April 2001)
- ❖ “Choosing our future: Conservation based development in Minnesota” at St. John’s University (June)
- ❖ Farm Forum 2001: Farm, Food and Community - St. John's University (Mar 2001)
- ❖ Kwongan Colloquium (Botany of Western Australia) - University of Western Australia, March 2006)
- ❖ Minnesota Native Plant Society Conference - Minnesota Landscape Arboretum, Chanhassen (June 1998); Apple Valley (March 2001)
- ❖ National Association of Biology Teachers - Minneapolis, Oct 1997; Reno (NV), Nov 1998; Orlando (FL), Oct 2000; Milwaukee, 2005.
- ❖ Pan-American Aerobiology Association Annual Conference - Tulsa (OK), June 2005 , June 2007 (State College, PA).
- ❖ Society for Conservation Biology - Grand Rapids (MN) (March, 2005).
- ❖ St. Cloud State University Student Research Colloquium (April 2003).

Department Service: (*listed alphabetically, since 2000*)

- ❖ Academic Advisor - College of St. Benedict/St. John's University. Fall 1981 - present.
- ❖ Chair, Biology Department; College of St. Benedict/St. John's University (Fall 1997 - Spring 2000).
- ❖ Computer Needs - departmental requests - wrote with M. Campos (Spring 2002)
- ❖ Editor, Biology Department Newsletter, Spring 1983 – 2004
- ❖ Greenhouse Director, College of St. Benedict/St. John's University Melancon Greenhouse (Fall 1985-May 1993; Fall 2002, Fall 2008 – present; includes *ad hoc* committee to hire a new greenhouse manager (spring semester)

- ❖ Herbarium Curator, Bailey Herbarium - College of St. Benedict/St. John's University. Fall 1981 - present.
- ❖ Introductory Biology Course/Lab Revision. (Summer 1993, 1998, 2005).
- ❖ Revised the Biology Department PowerPoint used in Science Day (Fall 2007)
- ❖ Seminar Scheduler. I have made arrangements for numerous seminar presentations at CSB/SJU. Fall 1981 - present.
- ❖ Safety Committee (Fall 1994 - Spring 2000).
- ❖ Tour guide - Biology Department . I have provided many tours to prospective CSB/SJU students. Fall 1981 - present.
- ❖ Web site editor - I serve as editor of the Biology Newsletter web site, Pollen Center web site, St. John's Maple Syrup web site, Bailey Herbarium web site, and my personal site featuring information about my classes and personal research.

College Service (*since 2000*):

- ❖ Established a weather station at St. John's that reports weather conditions to the web. Worked with Paul Beniek, IT Services, to upgrade the CSB/SJU Biology department weather station (<http://weatherstation.csbsju.edu/>)
- ❖ CSB Rank & Tenure Committee (2001 - 2002, 2003-2004; 2006 – present)
- ❖ served as a “walk leader” during the fall CSB/SJU All-Campus Community workshop (August 2007)
- ❖ St. John’s Health at Work – Botanical Nature Walks (numerous; one a month during 2004-2005, fall 2005, and fall 2006, 2007-2008)
- ❖ St. John’s Abbey – Forest and Land Committee (2005 - present)
- ❖ Saint John’s Arboretum Advisory Council (2005 - present); including subcommittees
- ❖ Chief maple-syrup maker for the St. John’s Arboretum (2001 – present)
- ❖ Tour guide/leader for a “Nature walk to the Chapel” hosted by Saint John’s Arboretum for Homecoming (Oct 2007)
- ❖ Admissions, photo shoot participant (Feb 2002)
- ❖ Campus Visit Day participant (Spring 99, Fall 2001, Fall 2002)
- ❖ Collegeville Colors, Oct 2003.
- ❖ Honors Council - Natural Science Representative (2000 - 2001)

- ❖ NCATE - faculty panel member for accreditation visit (April 2001)
- ❖ Post-Tenure Development process, Participant (2003 - 2004)
- ❖ Regents/Trustees Scholarship Interviewer (Mar 2001 & 2002, 2004, 2005)
- ❖ Science Day participant, 1991, 1992, 1993, Nov 1999 - 2006).
- ❖ Scholarship Day - participant (Apr 2002, 2005)
- ❖ Summer Research 2004 - program co-organizer with Dr. M Webster.
- ❖ Tour Guide - SJU Science facilities for the State of Minnesota House Higher Education Finance Committee (Feb 2001); also for faculty visitors from Wartburg College, IA (Aug 2001)
- ❖ Helped host the Maple 2001 Conference - St. John's (Fall 2001)
- ❖ Plant Science Alliance – faculty advisor (Fall 2007 – present)
- ❖ Ultimate Frisbee Club – faculty advisor (Fall 2006 – 2007)
- ❖ Discussion leader – film showing by Saint John’s Arboretum nature film showing (spring 2007)
- ❖ Fielded numerous questions and requests for information and images based on my website. For example, NOW Magazine (Toronto) reprinted my “Tips for Foragers”
- ❖ Participated in the “After Hours Event” sponsored by the Science Initiative of Central Minnesota at St. Cloud State University (Nov 2007) and the College of St. Benedict (Jan 2008)
- ❖ Chaperone – NCUR conference at Salisbury University (MD); April 2008

Public Service (*since 2000*):

- ❖ Deputy Clerk, Avon Township (MN); March 2007 – present
- ❖ Central Minnesota Audubon Society – program chair
- ❖ St. Joseph Farmer’s Market – Treasurer
- ❖ Big Woods Clean-up Day & Buckthorn Eradication Program - organizer (Spring 2000, Fall 2001, Fall 2006)
- ❖ Environment and Development Team - City of St. Cloud & City of Sartell (consultant for plats that occur in environmentally sensitive areas (Fall 1998 - present)
- ❖ Science Fair Judge - John Clark School Elementary School, Rockville, MN. (1991, 1994, 2001, 2002); Central Minnesota Regional Science Fair (1997, 1998, 2001, 2002, 2003); Cold Spring Elementary School (1997, 1999, 2000, 2001, 2003); Richmond Elementary School (Jan 2001)
- ❖ Naturalists - presentation to St. Joseph Cub Scouts (May 2001)

- ❖ St. Joseph Farmer's Market - Herbarium presentation (July 2000, July 2001, July 2002)
- ❖ Habitat Presentation - Oak Hill Elementary School 6th grade (April 2001)
- ❖ Consultant for a Boy Scout project involving the Lake Wobegone trail (Summer 2005).

Memberships:

Professional

- Society for Economic Botany
- National Association of Biology Teachers
- North American Mycological Society
- Minnesota Native Plant Society
- Pan-American Aerobiology Association

College

- Blue Key National Honor Fraternity
- Chi Beta Phi National Science Fraternity

Other related

- National Audubon Society (Central Minnesota Chapter)
- Minnesota State Horticultural Society (Stearns County chapter)
- Nature Conservancy
- Sierra Club

Honors:

- ❖ Sister Mary Grell Teacher of Distinction Award - College of St. Benedict (May 2007)
- ❖ Identified as a “professor to know” for first-year students (April 2008)
- ❖ Identified by seniors as a professor who has enhanced their experience at CSB/SJU (April 2008)
- ❖ Nominated for the natural Science Advisor of the year award (2007-2008)
- ❖ Listed in *The Record* (Oct 25, 2007) as a “Top Prof” (College of St. Benedict/St. John’s University student newspaper)
- ❖ Awarded a Scholarship and Excellent Pedagogy Award - for studies of airborne pollen (2006 - 2007).
- ❖ Received recognition for 25 years of service to CSB (Spring 2006)
- ❖ Tom Creed Award for Electronic Pedagogy (CSB/SJU). May 2003
- ❖ Certified Pollen Counter - Multidata Corporation. April 2003.
- ❖ Received recognition for 20 years of service to CSB (Spring 2001)
- ❖ Nominated for Sears-Roebuck Teaching Award at College of St. Benedict, Spring 1990.

- ❖ Nominated for the Sister Mary Grell Teaching Award - CSB/SJU (May 1999)
- ❖ Natural Science Advisor of the Year Award - College of St. Benedict/St. John's University (Spring 2001)

References:

available upon request

APPENDIX I: Courses Taught *(unless otherwise indicated, all at CSB/SJU)*

Full Semester (3-4 credit) Courses:

- Introduction to Cell & Molecular Biology (Biol 121) - formerly call Concepts of Biology 1 (Biol 115) - Lecture and laboratory.
- Introduction to Organismal Biology (Biol 221) - formerly call Concepts of Biology 2 (Biol 116) - Lecture and laboratory.
- Environmental Ethics (Core 300). Course for the Senior Seminar program. Fall 1990 & Spring 2006
- Field Botany - Botany 366. University of Illinois at Urbana-Champaign. Lecture, laboratory and field trips.
- Human Origins. Course for the Senior Seminar program, South Africa Study Abroad, Spring 1999.
- Life Science - Biology 110 (General Biology for non-majors). Lecture/Laboratory.
- Nature and the Naturalists (Hon 210). Course for the Honors program. Lecture/laboratory.
- Plant Physiology - Biology 327 (330). Lecture and laboratory.
- Plants and Human Affairs (Biol 106). Lecture/laboratory.
- Plant Taxonomy (Biol 308). Lecture/Laboratory.
- Symposium: Plants and Human Affairs (Core 100, Core 101). Lecture/discussion.
- Vascular Plant Systematics - University of Minnesota Lake Itasca Forestry & Biological Station

January Term or Short Courses

- Natural History of Maple Syrup (Spring 2008 – present)
- Aerobiology of Central Minnesota (Spring 2004).
- The Autoharp - Care, history and playing techniques. - Music 3084. Lecture and studio.
- Botany and Humanity. January Term 1986. Lecture and Laboratory.
- Botany for Gardeners (Biol 177). January Term 1994. Course focusing on horticultural techniques.
- Field Botany. Academic Summer Camp for High School Students. Lecture, lab and field trips. St. John's University. Summer 1987.
- Mycology. January Term 1990. Lecture/laboratory.
- Plants and Human Affairs. Summer Elderhostel Program, College of St. Benedict. June 1983 & 1986.
- Plants in Our Daily Lives. Elderhostel Course. Little Falls (Sept 1997)
- Winter Botany. January 1984 & 1985. Lecture and Laboratory

Field Courses

- Costa Rica: Environment and Sustainable Development. Co-director for UMAIE course to Costa Rica. January 1997 (with E. Diedrich).
- Director. Irish Studies Program in Galway, Ireland. Fall 1990.
- Director. South Africa Study Abroad Program. Spring 1999
- Field Research. August 1984 (Aitikokan, Ontario); June 1986 (Lake Itasca, MN).
- Natural History of the BWCAW. Week-long field study of the BWCAW in Northern Minnesota. Summer 1987.
- New Zealand: Natural History and Sustainable Development. Co-director for UMAIE course to New Zealand, Jan 1998 (with E. Diedrich)
- Director. Australia Study Abroad Program, Fremantle, Western Australia. Spring 2006.

APPENDIX II: Botany and Related Coursework

Undergraduate (Lynchburg College):

- Anatomy of Seed Plants
- General Ecology
- Morphology of Non-Vascular Plants
- Morphology of Vascular Plants
- Plant Taxonomy
- Biology Seminar (Ethnomycological study of *Amanita muscaria*)

Graduate (University of Illinois):

- Advanced Plant Taxonomy
- Biochemistry (2 semesters)
- Comparative Microbial Chemistry
- Field Ecology
- Fungal Ecology
- General Mycology
- Identification, Separation, and Characterization of Unknown Organic Compounds
- Mycology Seminar (Basidiomycete metabolites)
- Plant Ecology
- Plant Pigments
- Plant Products
- Plant Physiology
- Plant Physiology Laboratory
- Plant Taxonomy Seminar (Ferns and Gymnosperms)
- Plant Cell Energetics
- Quantitative Biology (Statistics)
- Research Problems (Cyanogenesis in Fungi)
- Spectral Techniques in Organic Chemistry

Post Graduate:

- Natural and Artificial Photosynthesis - National Science Foundation Chautauqua Short Course, Argonne National Laboratory. May 1983.
- Microcomputers for Modeling and Simulation in Undergraduate Life Science Instruction. Michigan Technological Institute, Houghton, MI. June 18-29, 1984.
- Plant Biochemistry - University of California, Davis. Winter quarter, 1989. (audit)
- Crop Plant Evolution - University of California, Davis. Winter quarter, 1989. (audit)
- Fungi, Mosses and Algae - University of California, Davis. Spring quarter, 1989. (audit)
- Plant Diversity - Victoria University, Wellington, New Zealand; Spring 1996. (audit)
- Workshops (at CSB/SJU unless indicated):
- Critical Thinking Workshop; sponsored by Dr. Gene Garver, August 18-22, 1986.
- Natural Science Summer Workshop; Core Curriculum Project. June 2-5, 1986.
- Symposium Instructors Workshop; Core Curriculum Project. August 1985.
- Gender in the Classroom. January 1987.
- Bridging the Gap: Scholar to Teacher, teacher and student; inter-institutional faculty development program. Carleton College, Northfield. March - May 1988.
- Honor's Teacher's Workshop. Summer 1989.
- Senior Seminar Workshop. Summer 1990.
- Performance in Teaching; by Tom Darnell, Jan. 1992
- Wisconsin Fast Plants; University of Wisconsin-Madison, Feb. 1992.
- Time for Trees-Urban Forestry. Heritage Nature Center, St. Cloud. Spring 1993.
- Great Honors Teaching Workshop. August 1993.
- Department Chair's Retreat (May 1997, 1998)
- Collaboratorium II - computer workshop (June 1998)
- Defensive Driving Course (Spring 2001)
- Minnesota Worm Watch Workshop, St. John's (August 2003).

- “Mold Identification Short Course” sponsored by the University of Minnesota School of Public Health (May 2007)
- Faculty Technology Day - CSB/SJU (May 2007)

APPENDIX III: Independent Student Research Projects Supervised

(all at CSB/SJU; since 1990)

- ❖ Lorie Warren. "Trehalose and revivability in the genus *Marasmius*." Fall 1991.
- ❖ Karla Gengler. "The significance of mucilage of flax, *Linum usitatissimum*." Fall 1992.
- ❖ Anthony Dispanet. "An economic analysis of the Brazilian rain forest." Fall 1992. Served as a reader for Honor thesis committee.
- ❖ Stacy Abner. "Pesticide analysis in wells." Reader for Honors thesis committee. Fall 1993.
- ❖ Kelly Wolfe. Honors Thesis. "Vegetative composition of two prairie wildlife management areas in western Minnesota." Fall 1993.
- ❖ Dominic Ackerman. Honors Thesis. "Woody Plants of 100 Acres Quarry." Fall 1993
- ❖ Brad Matuska. "Effect of Mowing on Prairie Community in Quarry Park." Fall 1994. Brad won a Winchell Award at the annual meeting of the Minnesota Academy of Science for presenting the best paper in the ecology section (May 1995).
- ❖ Heather Laflin. "Competitive ability of soybean (*Glycine max*) against ragweed (*Ambrosia artemisiifolia*) in a field situation. Environmental practicum (1998).
- ❖ Steven McGreevy. "Aeromycological Survey of a compost facility in Cold Spring, Minnesota. (May 2000). As a partial consequence of this work, Steve was recognized by the Botanical Society of America with a "Certificate of Achievement" - the highest award for an undergraduate.
- ❖ Alex Mettler & Sarah A. Young. "Variation between and within populations of *Opuntia fragilis* in central Minnesota. (2001)
- ❖ Elizabeth Distelrath. "Benefits of a xeri-scaped prairie grass lawn." Liza presented her work at CSB/SJU Scholarship Day and the St. Cloud State University Undergraduate Research Conference. (2002).
- ❖ Jesse Barr. "History and environmental analysis of the St. John's maple syrup operation". Reader for Environmental Studies practicum project (2002).
- ❖ Chuck Griffith. "Wool mulching systems for specialty crops". Result of summer internship at the West Central Research and Outreach Center, Morris, MN. Summer 2002.
- ❖ Katrina Viegas. "Response of *Helianthus annuus* roots to changes in soil density." Spring 2003. Presented at CSB/SJU Scholarship Day and St. Cloud State University Undergraduate Research Conference.

- ❖ Sara Scott & Trisha McIntyre. "Medicinal Plants of Bagaces, Costa Rica." Spring 2003. Presented at the National Conference for Undergraduate Research (NCUR) national meeting in Salt Lake City (UT), CSB/SJU Scholarship Day, and St. Cloud State University Undergraduate Research Conference.
- ❖ James Wollack. "Is spring coming earlier? An analysis of flowering data from *Hepatica americana*." Presented at CSB/SJU Scholarship Day and the St. Cloud State University Undergraduate Research Conference (Spring 2003).
- ❖ Sarah Hegg. "Airborne Molds and Pollen in Central Minnesota." Summer 2003 research intern. Invited speaker for the St. Cloud State University Biology Department Seminar Series, March 2004.
- ❖ Erika Nunnink. "The History and Natural History of St. John's Maple Syrup." Independent Research Project, Spring 2004.
- ❖ Ben Rith-Najarian. "Impact of Exotic Earthworms on Soil Properties in the St. John's Arboretum." Summer - Fall 2004. Presented at the annual meeting of the Society for Conservation Biology (Grand Rapids, MN)
- ❖ Mark Zenzen. "Airborne Pollen and Mold Spores in Central Minnesota." CSB/SJU 2004 summer research program. Poster presented at the June 2005 meeting of the Pan-American Aerobiology Association Conference (Tulsa, OK; Summer 2005) and at CSB/SJU Scholarship Day (April 2005). Mark also worked with Brian on the sumac project and was a co-author on the poster with Brian Hoffman.
- ❖ Brian Hoffman. "Changes in Sumac Pigment Composition During the Growing Season." CSB/SJU 2004 summer research program. Poster presented at CSB/SJU Scholarship Day, April 2005. Brian also worked on pollen and was a co-author on the poster with Mark Zenzen.
- ❖ Andrew Soutar. "Atmospheric Pollen Survey Conducted During the Winter in Stearns County, Minnesota, USA." Poster presented at CSB/SJU Scholarship Day, April 2006.
- ❖ John Compton. "Effect of Light Fluence on Wilting Rate in *Eupatorium rugosum*." Honor's Thesis. Presented at the annual meeting of NCUR (National Conferences on Undergraduate Research), Dominican University (San Rafael, CA) and at CSB/SJU Scholarship and Creativity Day, April 2007.
- ❖ Andrew Conger. "A Comparative Analysis of Sugar Concentrations in Various Maple Species on the St. John's Campus." Poster presented at CSB/SJU Scholarship & Creativity Day, April 2007.
- ❖ John Turtle. "Monitoring Winter Pollen Counts in Central Minnesota." Poster presented at CSB/SJU Scholarship & Creativity Day, April 2007.
- ❖ Michael Steinmetz. "Pigment composition changes in smooth sumac (*Rhus glabra*) during autumn senescence," presented at NCUR (National Conference on Undergraduate Research; Salisbury University, MD) and at CSB/SJU Scholarship & Creativity Day (April 2008)
- ❖ Erin C. Morley. "Mechanism of raphide discharge from *Dieffenbachia* idioblasts," presented at NCUR (National Conference on Undergraduate Research; Salisbury University, MD), CSB/SJU Scholarship & Creativity Day, and as a CSB/SJU Biology Department seminar (April 2008).

- ❖ Melissa J. Bach entitled, “Model for the mechanism of sap flow in maple tree,” presented at CSB/SJU Scholarship & Creativity Day (April 2008)

last updated: *September 30, 2008*