Requirements for Honors in Chemistry include a program of research with readings from the original literature, presentation of an Honors Essay, typically about 60 pages in length, and the satisfactory completion of a comprehensive oral examination in the subject area of the research. Nineteen Seniors were awarded Honors in Chemistry.

- **Sharon Azoury**: "Protection of Quinizarin at the Phenolic Oxygen"
- **Raja Bakhshi**: "Synthesis, Densities and Dipole Moments of Model Ethermides, Effect of Li$_2$CO$_3$ and Cs$_2$CO$_3$ on Cyclic Poly(arylene) ethers"
- **Jeffrey Bergman**: "Magnetic Properties of Mn$_{(1-x)}$Ni$_x$Cl$_2$·4H$_2$O and Co$_{(1-x)}$Mn$_x$Cl$_2$·H$_2$O"
- **Kerry Buschman**: "Synthesis of 3,3-[[α-Hydroxy-Tetramethylene] Diazarine"
- **Rebecca Casaubon**: "Investigation of Mechanism-Based Inhibition of Peptidylglycine-α−Amidating Monoxygenase"
- **Kathleen Crahan**: "Analysis of Mercury Coordination Environments of Tripodal Tetradentate Ligands"
- **Stephen Diehl**: "Synthesis and Characterization of Soluble Transition Metal Chelates of 1,4-Dihydroxyanthraquinone"
- **Own Duckworth**: "Environmental History of the Upper Lake Matoaka Delta Drainage Basin"
- **James Garrett**: "Degradation in an Offshore Marine Environment: A Study of Nylon-11 and PPS"
- **Robin Gittleson**: "Characterization and Degradation of..."
- **Nicole Haralampus**: "Dynamic Monte Carlo Simulation of the Effect of Pore Size on the Glass Transition Temperature and the State of the Glass"
- **Elise Hattersley**: "Synthesis of 3-Cycloheptatrienyl-1,5-Hexatriene"
- **Robert Ivy, Jr.**: "The Wittig Reaction with 6-O-Deoxy-6-Formyl-β-Cyclodextrin and a Dicyanoanthracene-Stabilized Ylide"
- **Kristin Joslyn**: "Synthesis and Characterization of Mercury-Quinolyl Based Ligand Complexes"
- **Heather King**: "The Magnetic Properties and Magnetic Phase Diagram of Co$_{(1-x)}$Ni$_x$Cl$_2$6H$_2$O and Temperature-Dependence of Thermoremanent Magnetization of Mn$_{(1-x)}$Co$_x$Cl$_2$H$_2$O"
- **Daniel Kopp**: "Solvent Effects on the Conformational Equilibrium in Small Amides"
- **Stephanie Roder**: "Optimization of Tertiary Amide Reduction Conditions"
- **David Thomas**: "Synthesis of Alkenyl(aryl) Iodonium Triflates and..."
Nylon-11, PVDF and PPS"  the Decomposition of 2-Menthy1-1-Propanyl (4-Trifluoromethylphenyl) Iodonium Triflate"