

# TERRY L. LATHEM

## CURRICULUM VITAE

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### EDUCATION

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- 2004-2006      **GEORGIA INSTITUTE OF TECHNOLOGY (GT)**      Atlanta, GA  
*Bachelor's Degree in Earth and Atmospheric Science with Highest Honor*  
• GPA: 4.0 / 4.0 (69 credit hours)
- 2002-2004      **GAINESVILLE STATE COLLEGE (GSC)**      Gainesville, GA  
*Concentration towards a Bachelor's Degree in Physics*  
• GPA: 4.0 / 4.0 (66 credit hours)

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### BACKGROUND COURSES

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STELLAR ASTROPHYSICS	MODERN PHYSICS	THERMODYNAMICS
GLOBAL CLIMATE CHANGE	ATMOSPHERIC CHEMISTRY	ATMOSPHERIC DYNAMICS
LARGE-SCALE ATMOS. CIRCULATION	EARTH PROCESSES	EARTH SYSTEM MODELING
RADAR/SATELLITE METEOROLOGY	SYNOPTIC METEOROLOGY	METEOROLOGICAL FORECASTING
ENVIRONMENTAL FIELD METHODS	GENERAL CHEMISTRY	INORGANIC CHEMISTRY
PHYSICS I,II	CALCULUS I,II,III	DIFFERENTIAL EQUATIONS

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### HONORS AND AWARDS

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- 2007
- *Awarded*, Georgia Tech Institute Fellowship (GTIF) for graduate study
  - *Awarded*, NASA Langley Aerospace Research Summer Scholar (10 week internship)
  - *Honorable Mention*, NSF Graduate Research Fellowship Program
- 2006
- *Awarded*, President's Undergraduate Research Award Grant (\$1500)
  - *Awarded*, EAS Quarter Century Award
- 2005
- *President*, Gamma Alpha Tau Honor Society (EAS Honor Society)
  - Gamma Beta Phi Honor Society
- 2004
- *Awarded*, GSC Physics Student of the Year
- 2003
- *Awarded*, GSC Dean's Scholar
  - *Awarded*, Ingles Supermarkets Scholar
  - *Awarded*, Georgia Food Industry Association Scholar
  - Phi Theta Kappa Honor Society
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## RESEARCH EXPERIENCE

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### GEORGIA INSTITUTE OF TECHNOLOGY

Summer 2005

Summer 2006 *Advisors: Drs. Judith Curry, George Chimonas, Athanasios Nenes*

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- Application of Unmanned Aerial Vehicles (UAVs) for Atmospheric and Cloud Microphysics Research.
- Tasks included researching relevant sensors for implementation onto UAVs, designing and constructing a UAV in collaboration with GT Aerospace, analysis of video ice particle sampler data from previous flights in Barrow, Alaska, and correlating the ice particle analysis with concentrations of atmospheric pollutants obtained from in-situ and remote measurements.
- Examined how the stably stratified atmosphere devolves to a state of turbulence and mixing using CASES99 rawinsonde data and obtaining fourier spectra and spectral power densities from these datasets.

Spring 2006: *Advisors: Drs. Martial Taillefert and Rodney Weber*

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- Chemical characterization of PM 2.5 aerosol using an atmospheric air particle sampler with filter-pack assembly and analysis of filter extracts using a Dionex model Ion Chromatograph with UV/Vis columns.
- Research cruise onboard the *RV Savannah*, where sediment core samplers and CTD Rosettes were deployed
- Subsurface imaging using Ground Penetrating Radar

Fall 2006

Spring 2007 *Advisor: Dr. Athanasios Nenes*

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- Laboratory studies on surface tension, hydroscopicity, and activation of multi-component organic and inorganic solutions using a pendant drop tensiometer and cloud condensation nuclei counter.
- Certified Radiation Worker and RAM training

## Publications

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Chimonas, G, J. Castellanos, J. Curry, and **T. Lathem**. "Spectra of the vertical wind and temperature profiles in the troposphere and lower stratosphere." *Journal of Atmospheric Sciences*. 2007. (Submitted)

Chimonas, G, J. Castellanos, J. Curry, and **T. Lathem**. "The Shears and Sub-Structure of the Troposphere at the Scales where Laminar Flow Devolves into Turbulent Flow." 2006. (in preparation).