

COLLEGE OF ARTS AND SCIENCES
FACULTY AREAS OF EXPERTISE BY DEPARTMENT

DEPARTMENT OF BIOLOGY		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Brown, Christopher A. Associate Professor and Chair	cabrown@tntech.edu (931) 372-3013	Ecology, life history evolution, and behavior of terrestrial arthropods, primarily scorpions and spiders • Understanding the effects of autonomy (limb loss) on ecology and behavior • Food web ecology of riparian systems
Beck, David L. Assistant Professor	dbeck@tntech.edu (931) 372-3375	Infectious diseases of humans
Bettoli, Phillip Professor Emeritus	pbettoli@tntech.edu (931) 372-6430	Dynamics of exploited fish populations • Endangered species management
Carver, Brian D. Assistant Professor	bcarver@tntech.edu (931) 372-3127	Mammalian community dynamics • Conservation of rare mammals • Bat biology and management
Cohen, Bradley S. Assistant Professor	bcohen@tntech.edu (931) 372-6410	Wildlife ecology and management of game animals, especially for deer and turkey • Predator-prey interactions
Combs, Daniel L. Professor	dcombs@tntech.edu (931) 372-6541	Ecology and behavior of avian wildlife species, especially waterfowl • Habitat use and natural history of reptiles and amphibians
Cook, S. Brad Professor	sbcook@tntech.edu (931) 372-3194	Ecology of freshwater invertebrates • Fish parasitology • Feeding ecology and bioenergetics of freshwater fishes • Biotic indices
Gunderson, John H. Associate Professor	jgunderson@tntech.edu (931) 372-3250	Microbial ecology and evolution • Symbiosis
Hall, Joshua M. Assistant Professor	jmhall@tntech.edu (931) 372-3444 www.devoeco.org	Herpetology • Urban adaptation and global change biology • Developmental biology and embryo physiology

		<ul style="list-style-type: none"> • Ecological developmental biology • Life-history evolution of reptiles and amphibians, particularly reproductive adaptations to seasonality • Thermal adaptation and heat stress physiology of reptiles and amphibians • Analysis, interpretation, and presentation of physiological data using R
Hayslette, Steven E. Professor	shayslette@tntech.edu (931) 372-3146	Wildlife ecology and management <ul style="list-style-type: none"> • Avian ecology, behavior, and nutrition • Ecology and management of upland game birds
Hurt, Carla R. Associate Professor	churt@tntech.edu (931) 372-3143	Processes of speciation and diversification in marine invertebrates and the implications that these processes have on conservation of biodiversity. Specifically, the use of molecular tools to (1) identify taxonomic lineages and cryptic diversity, (2) reconstruct phylogenetics histories and the geographic context of species radiations, (3) examine ecological and developmental factors that promote and sustain species reef diversity, and (4) assess the geographic structure of genetic variation within marine symbiotic communities
Kissell, Jr., Robert E. Professor	rkissell@tntech.edu (931) 372-6240 https://sites.google.com/site/kissellslab	Species-habitat associations and population ecology of mammals, especially furbearers and large mammals
Krosnick, Shawn E. Associate Professor	skrosnick@tntech.edu (931) 372-6194 https://sites.tntech.edu/skrosnick/	Plant taxonomy <ul style="list-style-type: none"> • Molecular systematics • Floral development • Plant morphology and anatomy • Evolutionary developmental biology

Murdock, Justin N. Associate Professor	jmurdock@tntech.edu (931) 372-3147 https://sites.tntech.edu/jnmurdock	Algal ecology • Nutrient cycling • Stream community ecology • Disturbance ecology • Microscopy and imaging techniques
Roberts, Thomas H. Professor Emeritus	troberts@tntech.edu	Animal ecology • Wetland ecology • Habitat evaluation and management
Rogers, Mark W. Co-operative Fishery Research Unit Leader and Assistant Professor	mwrogers@tntech.edu (931) 372-3032	Fisheries ecology and management • Aquatic food webs • Invasive species • Population dynamics and modeling
Rosenberger, Amanda Co-operative Fishery Research Unit Assistant Leader and Associate Professor	arosenberger@tntech.edu	Ecology and conservation of freshwater biota, including fish, mussels, and crayfish, with an emphasis on the role of ecological processes in shaping aquatic organisms' distributions, population characteristics, and community structure
Wheeler, Christopher (Kit) Assistant Professor	kitwheeler@tntech.edu (931) 372-3780 www.tntechstreamfishecology.org	Stream fish ecology and conservation • Biodiversity-ecosystem functioning in aquatic environments • Flow ecology • Ecological modeling

DEPARTMENT OF CHEMISTRY

NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
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Alonge, Emily Instructor	Ealonge@tntech.edu 931-372-3238	Chemical education
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Boles, Jeffrey, Ph.D. Professor and Chair	jboles@tntech.edu 931-372-3416	Analytical Biochemistry (Protein Purification, Electrophoresis, Mass Spectrometry) • Proteomics (including Environmental Proteomics) • Forensics of Clandestine Drugs (Chemical Fingerprinting using LC/MS/MS) • Protein Chemistry (Reaction Kinetics, Covalent Modification) and Structural Biochemistry (incorporation of unnatural
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		selenium and tellurium containing amino acids into proteins)
Callender, Andrew, Ph.D. Assistant Professor	acallender@tnitech.edu 931-372-6273	Analytical chemistry and spectroscopy • applications of dispersive liquid-liquid microextraction techniques for chromatography and spectroscopy • statistics and data science for interpretation of analytical data • low-cost analytical instrumentation for the developing world
Carrick, Ann Marie Senior Instructor	acarrick@tnitech.edu 931-372-3426	Chemical education
Carrick, Jesse, Ph.D. Professor	jcarrick@tnitech.edu 931-372-6199	Minor actinide separations from spent nuclear fuel using soft-Lewis basic donors • heterocycle synthetic method development • medicinal chemistry • natural product total synthesis
Carroll, Amanda, Ph.D. Senior Lecturer	acarroll@tnitech.edu 931-372-6324	Chemical education (teaching, learning, and mentoring strategies) • Analytical/Inorganic Environmental Chemistry (utilizing chelating resins to remove metals from aqueous sources)
Carroll, William, Ph.D. Associate Professor	wcarroll@tnitech.edu 931-372-6094	NMR spectroscopy • Residual Dipolar Couplings • physical organic chemistry
Cashman, Derek, Ph.D. Lecturer	dcashman@tnitech.edu 931-372-3434 http://sites.tnitech.edu/dcashman	Computational Biophysics and Medicinal Chemistry. Specific areas of ongoing research include: (a) computational drug discovery of novel antibacterial (DHFR) and antiviral (COVID-19) agents; (b) protein-protein interactions and molecular dynamics simulations of Photosystem I; and (c) 3D printing techniques of biomolecules and small molecules.
Cojocar, Andreea, Ph.D. Instructor	ocojocar@tnitech.edu 931 372-6399	(a) Applying the ionic liquids strategy to bio-renewable materials and utilizing the new materials for

		<p>pharmaceutical and environmental applications</p> <p>(b) Synthesis, development, and study of active pharmaceutical ingredients in liquid form</p> <p>(c) Development of new delivery systems for active pharmaceutical ingredients in liquid form.</p>
<p>Coonce, Janet Senior Instructor</p>	<p>jcoonce@tntech.edu 931-372-6521</p>	<p>Chemical Education: Research and design of tutorials, games, and animations for introductory Chemistry students</p>
<p>Crouse, David, Ph.D. Associate Professor</p>	<p>dcrouse@tntech.edu 931-372-3515</p>	<p>Organic Chemistry • Polymer Chemistry</p>
<p>Gichuhi, Wilson, Ph.D. Associate Professor</p>	<p>wgichuhi@tntech.edu 931-372-3499</p>	<p>Atmospheric Chemistry and Environmental Spectroscopy: The main research goal of my research group to apply infrared spectroscopic techniques in environmental and atmospheric detection of trace gases. Our measurements assist in gaining insights onto fundamental photophysical and photochemical processes, as well as the fate of reactive and non-reactive trace gases in urban and sub-urban environments. In the first project, we utilize a high-precision continuous wave Cavity-Ring-Down Spectroscopic (CRDS) for ground-based measurements of dry mixing ratios of methane (CH₄), carbon dioxide (CO₂) and carbon monoxide (CO) within the shallow boundary layer of the atmosphere. In the second project, mid and near infrared spectroscopic techniques are employed to detect and quantify non-methane hydrocarbons (NMHC) as methane tracers in the environment. In</p>

		addition to playing a significant role in tropospheric chemistry and ozone formation, these NMHC provide critical molecular signatures that are useful in partitioning local and regional CH ₄ emissions between various sources.
Glinski, Robert, Ph.D. Professor	rglinski@tntech.edu 931-372-3420	Molecular emission spectroscopy • astronomical spectroscopy • astrochemistry • dynamics of molecules in astrophysical environments--comets and interstellar media.
Holden, Zachary, Ph.D. Instructor	zholden@tntech.edu 931-372-3748	Computational chemistry • QM/MM Simulations including Ewald summation • Chemical Education • Undergraduate PChem lab development • NMR kinetics of H-D exchange in hypophosphite
Jiang, Xiaohua, Ph.D. Associate Professor	xjiang@tntech.edu 931-372-3184	Interactions between thiosemicarbazones and replication enzyme topoisomerase-II- α . Thiosemicarbazones exhibit anti-proliferative activity and can be used as a potential anticancer drug by inhibiting topoisomerase-II- α . Research in our laboratory seeks to understand what characteristics of thiosemicarbazones are important for inhibition as well as the extent these compounds can inhibit topoisomerase-II- α . Our ongoing work encompasses biochemical assays to study the dose-dependency of these compounds with the enzyme and NMR spectroscopy to study the physical interactions between these compounds and the enzyme during inhibition. Our lab is also

		currently investigating the C-terminus of human topoisomerase-II- α to obtain information about the factors that regulate the activity of the enzyme.
Kocher, Lesta Instructor	lkocher@tntech.edu 931-372-6819	Environmental chemistry
Lisic, Edward, Ph.D. Professor	edlisic@tntech.edu 931-372-3425	Coordination chemistry of the transition metals, ligand synthesis, nuclear medicine <ul style="list-style-type: none"> • Director of the Undergraduate Research Program (U.R.E.C.A. and C.I.S.E.)
Majors, Twanelle, Ph.D. Lecturer	tmajors@tntech.edu 931-372-3425	Plant compounds suitable for agrichemical and medicinal applications, AP Chemistry, assessment development and quantitative evaluation, K-16 non-majors multicultural STEM pedagogies and assessment, impact of deficit ideologies on STEM learners.
Moldenhauer, Jonathan, Ph.D. Instructor	jmoldenhauer@tntech.edu 931-372-6866	Fundamental electrochemistry pertaining to basic electrochemical properties and novel solvents <ul style="list-style-type: none"> • electrochemical sensors for in situ real time monitoring of analytes.
Mullins, Gene Lab Coordinator	gmullins@tntech.edu 931-372-3536	Instrumentation • method development and application <ul style="list-style-type: none"> • polymer applications
Pratihari, Subha Instructor	spratihari@tntech.edu 931-372-3237	Dynamics of soft landing of peptide ions on organic surfaces • Dynamics of collision induced dissociation of peptide ions • Dynamics of noble gas collision on ice surface • Dynamics of chemical reactions in gas phase • Post-transition state dynamics • Quantum chemical calculations followed by parameterization of PES for development of force field parameters <ul style="list-style-type: none"> • Classical dynamics simulations • QM and QM/MM direct dynamics simulations

Rezsnyak, Chad, Ph.D. Associate Professor	crezsnyak@tntech.edu 931-372-6282	Development and implementation of novel pedagogies and resources to improve the educational experience of chemistry students
Rust, Kathryn Instructor	krust@tntech.edu 931-372-3423	Chemical education
Swartling, Daniel, Ph.D. Associate Professor	dswart@tntech.edu 931-372-3431	Bio-organic and medicinal chemistry • Green and sustainable chemistry • Alternative energy and biofuels. Biomass for sustainable chemical feedstocks
Zhan, Xuanzhi, Ph.D. Associate Professor	xzhan@tntech.edu 931-372-3427	Our group is focusing on understanding the mechanisms of ASK1-initiated mitogen activated kinase (MAPK) signaling. We have placed a strong emphasis on reconstructing these interested cellular signal cascades with purified proteins. A combination of biochemical, biophysical, bioanalytical and computational approaches are employed to explore the dynamic movements, post-translational modifications, and protein-protein interactions in these signaling pathways. Particularly, we are focusing on three research areas: (1) the activation mechanisms of ASK1, one of the MAP3Ks; (2) the assembly of ASK1-MKK4/7-JNKs complex, and the molecular recognition between enzyme and substrate; (3) the regulation of scaffold protein (arrestin) in these MAP Kinase cascades.
Zhang, Hong, Ph.D. Professor	h Zhang@tntech.edu 931-372-6325	Physical and chemical processes, dynamics, chemical kinetics, molecular mechanisms, consequences, and control of transport, transformation, and cycling of pollutants and natural chemical substances in the environment, crossing air, water, plant, and soil, on local, regional, and global scales in general, and those associated with mercury

		in particular. Application of analytical chemistry in environmental chemistry. The research areas involve environmental photochemistry, environmental geochemistry, aquatic chemistry, soil chemistry, atmospheric chemistry, environmental biochemistry, environmental analytical chemistry, molecular biogeochemistry, and global biogeochemistry.
DEPARTMENT OF EARTH SCIENCES		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Luna, Jeannette Associate Professor and Interim Chair	jwolak@tntech.edu (931) 372-3695	Sedimentology and stratigraphy <ul style="list-style-type: none"> • Carbonate/clastic slope environments • Deepwater deposition • Planetary geology • Petroleum geology • Mineral exploration
Asante, Joseph Assistant Professor	jasante@tntech.edu (931) 372-3576	Society, environment, climate, hydrogeology, watershed, and aquatic chemistry: Impact on water quality, quantity and availability
Harrison, Michael Professor	mharrison@tntech.edu (931) 372-3751	Field geology • Geologic mapping • Rock deformation <ul style="list-style-type: none"> • Tectonics, whole-earth structure, mountain formation
Hart, Evan Professor	ehart@tntech.edu (931) 372-3516	Fluvial geomorphology <ul style="list-style-type: none"> • Flood hydrology • Karts, soils, coastal processes
Li, Peter Professor	pli@tntech.edu (931) 372-3752	GIS and geospatial analysis <ul style="list-style-type: none"> • Environmental applications of GIS
Michel, Lauren Assistant Professor	lmichel@tntech.edu (931) 372-3188	Climate science • Ancient soils (paleosols) • Stable isotope geochemistry <ul style="list-style-type: none"> • Paleoclimate and paleoenvironmental reconstructions

DEPARTMENT OF ENGLISH		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Null, Linda Professor and Chair	lnull@tnitech.edu (931) 372-3345	18 th -century British Novel • Jane Austen
Baker, Tony Professor, Director of Composition	abaker@tnitech.edu (931) 372-6314	Rhetoric • First-year composition • Writing pedagogy • Writing assessment • Graphic novels • Cultural and literary representations of autism
Bounds, Paulina Associate Professor	pbounds@tnitech.edu (931) 372-3763 http://paulinabounds.wixsite.com/paulinabounds	Perceptual dialectology • Language perceptions • Linguistic attitudes • Language variation • Linguistics of speech • GIS mapping of linguistic perceptions, grade perceptions, mindfulness, grading strategies in classroom
Burduck, Michael Professor	mburduck@tnitech.edu (931) 372-3360	Early 19 th -Century American Literature (Irving, Cooper, Poe, Hawthorne, Whitman), Gothic Literature, William Faulkner
Cardana, Robert Lecturer	rcardana@tnitech.edu (931) 372-3660	Theater design and technology • The theater of: Politics, religion, grocery stores, protest, classrooms • Creativity • Small business marketing
Creter, Mark H. Professor and Artistic Director	mcreter@tnitech.edu (931) 372-4578 www.tnitech.edu/bdph	Theatre-Acting (for stage and camera) • Directing (all genres) • Voice and Diction • Shakespeare in Performance • Film Studies • Script Analysis • Audition Techniques • Dramatic Literature
Deiter, Kristen Associate Professor	kdeiter@tnitech.edu (931) 372-3328	Shakespeare • Early Modern English literature (poetry, drama, prose) and culture • Literary criticism and theory • Early Modern London, Tower of London

Ductan, Monic Assistant Professor	mductan@tntech.edu (931) 372-3909	Fiction writing (realism) • The personal essay and memoir • Appalachian literature • Southern literature • African-American literature • Working-class literature
Ernst, Daniel Lecturer	dernst@tntech.edu (931) 372-3164	Writing and educational assessment • Measurement of learning • Technical communication • Public and political rhetoric
Fisk, William Senior Instructor	wfisk@tntech.edu (931) 372-3349	American literature • British literature
Gray, Jennifer Assistant Professor	jgray@tntech.edu (931) 372-6569	20 th and 21 st century British and Anglophone literature, particularly British Empire literature; women's literature; culinary diplomacy in literature; African, Middle Eastern and South Asian literatures
Henry, Sharon Lecturer	shenry@tntech.edu (931) 372-6271	
Hoover, Erin Assistant Professor	ehoover@tntech.edu (931) 372-3347	Poetry writing • Gender and 20 th /21 st century poetics • Literary and professional editing • Equity in publishing
Hunt, Helen Assistant Professor	hhunt@tntech.edu (931) 372-3346	Early American literature, especially early novels, gender and sexuality studies, and queer theory
Laird, Shirley Professor	slaird@tntech.edu (931) 372-3348	Chaucer • Shakespeare • Tolkien • Grammar • Early English literature
McQuail, Josephine Professor	jmcquail@tntech.edu (931) 372-6207	British Romantic literature and William Blake • Victorian literature • 20 th - Century British literature • James Joyce • Janet Frame
Moynihan, Susan Muchshima Senior Lecturer	smoynihan@tntech.edu (931) 372-3909	American literature, late 19-21 st -Century • Comparative American ethnic literature, Asian American literature • Gender and women's literature • Autobiography

		<ul style="list-style-type: none"> • Theories of trauma and affect/emotion
Pelton, Ted Professor	tpelton@tntech.edu (931) 372-3047	Fiction writing • Small press and literary magazine publishing • Jack Kerouac and the Beat Generation • Herman Melville, and 19 th C. American literature • History and form of the novel • Creative inquiry instruction
Pickering, Kristin Professor	kpickering@tntech.edu (931) 372-6568	Emotion and professional/technical communication • Identity construction • Textual analysis • Disciplinary/professional genres • Oral communication assessment • Rhetoric • Qualitative research strategies • Rhetoric of sustainability • Government communication
Ramler, Mari Assistant Professor	mramler@tntech.edu (931) 372-3768	Critical theory • Gender and sexuality studies • Science and religion • The rhetoric and communication of digital censorship • Usability • Ecology
Robinson, Elizabeth Senior Instructor	erobinson@tntech.edu (931) 372-3350	American literature • Novels • Young adult literature • John Steinbeck • Edgar Allan Poe • Film • Composition
Smith, Andrew William Senior Instructor	asmith@tntech.edu (931) 372-3345 https://sites.google.com/site/professorandysmith/	Christian social justice movement and Christian counter-culture
Stenson, Matthew Scott Instructor	stenson@tntech.edu (931) 644-7229	Shakespeare • Milton • Romantics • History of rhetoric • Sacred literature
Williams, Brian Associate Professor	bjwilliams@tntech.edu (931) 372-3338	20 th C. American fiction • Contemporary American fiction and the literature of war and trauma (particularly Vietnam, Afghanistan, and Iraq)

DEPARTMENT OF FOREIGN LANGUAGES		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Sheehan, Martin Associate Professor of German and Interim Chair	MSheehan@tntech.edu (931) 372-6535	Digital humanities • Cultural analytics • Literary network analysis • Twitterbots • Film studies • Photography theory • Dramatic comedy • Disability studies • The long nineteenth century • George Trakl
Barnard, Debbie Associate Professor of French	DBarnard@tntech.edu (931) 372-3773	Francophone literature • North Africa • Critical identity studies • Urban theory • Postcolonial theory • Religion and identity
Groundland, Mark Associate Professor of Spanish	MGroundland@tntech.edu (931) 372-3158	Don Quixote • Literature, history, culture of the Spanish Golden Age • Bibliography • Moriscos
Gruber, Julia Associate Professor of German	JGruber@tntech.edu (931) 372-3787	German studies • Jewish Austrian literature • Family novel • Jewish child exiles • German film • Berlin • Female anger and resistance in the German-speaking world • Dr. Heinrich Hoffmann's <i>Der Struwwelpeter</i>
Humita, Cristina Lecturer of Spanish	MCHumita@tntech.edu (931) 372-3778	Spanish language • Latin American culture and literature • Second language acquisition • Bilingualism
Kazakova, Elena Lecturer of French	EKazakova@tntech.edu (931) 372-3776	Early modern literature • Theory and practice of translation in the early modern period • Foreign language pedagogy and assessment
Olsen, Michael Assistant Professor of Spanish, Curriculum Director for TTU's Center for English as a Second Language	MOlsen@tntech.edu (931) 372-3777	Spanish linguistics • Second language acquisition • Applied linguistics • Spanish dialectology • Foreign language teacher education • Foreign language pedagogy

Villalba, Manuel Assistant Professor of Spanish	MVillalba@tnitech.edu (931) 372-3771	Exile and diaspora studies • Critical theory • Contemporary Spanish culture and literature • Film studies
DEPARTMENT OF HISTORY		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Dollar, Kent T. Professor and Interim Chair	kdollar@tnitech.edu (931) 372-6547	Colonial America, Early National, Civil War and American Religion
Akehinmi, Krystal Assistant Professor	kdfakehinmi@tnitech.edu (931) 372-6322	African-American and women's history
Banton, Arthur Assistant Professor	abanton@tnitech.edu	Sports • Race • Ethnicity • Modern cultural history
Beason, Ed Adjunct Faculty	ebeason@tnitech.edu (931) 372-6548	U.S. history and digital history
Birdwell, Michael E. Professor	birdie@tnitech.edu (931) 372-3356	Cultural history, film, and World War I
Brown, R. Keith Adjunct Faculty	rbrown1@k12tn.net (931) 372-3332	U.S. history
Davis, Phillip C., Jr. Instructor	pdavis@tnitech.edu (931) 372-3333	U.S. history
Driggers, E. Allen, Jr. Associate Professor	edridders@tnitech.edu (931) 372-3335	British history • History of science • History of engineering • History of Earth sciences • History of chemistry
Hinton, Paula K. Associate Professor	phinton@tnitech.edu (931) 372-3339	Women, gender, and history of crime
Laningham, Susan D. Professor	slaningham@tnitech.edu (931) 372-6254	Ancient/medieval/early modern Europe, Mediterranean, Mexico, religion, and women
Propes, C. Elizabeth Associate Professor	epropes@tnitech.edu (931) 372-3616	Modern France, 19 th -century Europe, and African history
Roberts, Jeffery J. Professor	jroberts@tnitech.edu (931) 372-3365	European Military, Russia, and Middle East History
Schiller, Samuel Adjunct Faculty	ajs@schillerlawfirm.com (931) 372-3332	U.S. legal history
Schmitzer, Jeanne Adjunct Faculty	jschmitzer@twlakes.net (931) 372-6025	U.S. history
Smith, Laura Instructor	lesmith@tnitech.edu (931) 372-3335	U.S. history

Smith, Troy D. Associate Professor	tdsmith@tntech.edu (931) 372-6297	Western U.S., Native American, and environmental history
DEPARTMENT OF MATHEMATICS		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Allen, Michael Professor, Interim Chair	mallen@tntech.edu (931) 372-3569	Time series • Spatial statistics • Bootstrapping • Machine learning • Additive manufacturing
Chambers, Amy Associate Professor	achambers@tntech.edu (931) 372-3690	C* - algebras and Wavelets
Davis, Chris Associate Professor	cbdavis@tntech.edu (931) 372-3445 http://math.tntech.edu/cbdavis/	Numerical analysis of partial differential equations • Developing and analyzing partition of unity methods for fourth (and higher) order problems
Hetzel, Andrew J. Associate Professor	ahetzel@tntech.edu (931) 372-3581 http://math.tntech.edu/ajhetzel	Multiplicative Ideal Theory • Commutative Ring Theory
Kubiak, Damian Associate Professor	dkubiak@tntech.edu (931) 372-3529	Functional analysis • Banach spaces • Function spaces • Operator Theory
LeBorne, Richard Professor	rleborne@tntech.edu (931) 372-3582	Numerical analysis of algorithms in adaptive signal processing • STEM education • Learning mathematics for long-term retention
Liu, Yung-Way Professor	ywliu@tntech.edu (931) 372-3564	Differential equations • Integral equations and their applications
Machida, Motoya Associate Professor	mmachida@tntech.edu (931) 372-3583	Probability theory • Stochastic process • Mathematical statistics
O'Connor, Brian Associate Professor	bmoc@tntech.edu (931) 372-3570	Numerical analysis and partial differential equations
Shibakov, Alexander Professor	ashibakov@tntech.edu (931) 372-3438	Topology and Set Theory • Probability and Measure Theory • Theory of Computation and Computer Arithmetic
Smith, David Professor	ddsmith@tntech.edu (931) 372-3568	Statistical consulting • Climate modeling • Extreme value models • Small area estimation

		<ul style="list-style-type: none"> • Bayesian methods for data analysis
Veerapen, Padmini Associate Professor	pveerapen@tntech.edu (931) 372-3526	Noncommutative algebra <ul style="list-style-type: none"> • Noncommutative algebraic geometry
DEPARTMENT OF PHYSICS		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Robinson, Steve Professor and Chair	sjrobinson@tntech.edu (931) 372-3480 http://iweb.tntech.edu/sjrobinson/	Physics Education Research (PER) <ul style="list-style-type: none"> • Curriculum development for physics and physical science courses • Faculty development in teaching and learning
Ayik, Sakir Professor	ayik@tntech.edu (931) 372-3156	Heavy-ions reactions
Engelhardt, Paula V. Associate Professor	engelhar@tntech.edu Bruner 215 (931) 372-3629	Physics education research
Holley, Adam Assistant Professor	aholley@tntech.edu Bruner Hall 222 (931) 372-3145	Interests: Low-energy fundamental physics <ul style="list-style-type: none"> • Quantum computing/information • Computational modeling Expertise: Production and detection of cold and ultracold neutrons, neutron polarimetry <ul style="list-style-type: none"> • Monte Carlo simulations • Radio frequency systems • Data acquisition hardware/software and analysis techniques for particle detection systems • Vacuum technology and low-temperature systems (e.g., liquid He systems, dilution refrigerators, SQUIDs, superconducting magnets)
Kidd, Mary Assistant Professor	mkidd@tntech.edu Bruner 216 (931) 372-3477	Rare decay searches (neutrinoless double beta decay, dark matter) <ul style="list-style-type: none"> • Particle detection • Environmental applications of nuclear physics • Applications of radioactive

		<p>decay processes • Imaging using nuclear physics • Astronomical imaging Expertise: Gamma-ray spectroscopy • Operation of high purity germanium detectors and scintillators • Monte Carlo simulations • Some image analysis</p>
<p>Kozub, Raymond L. Professor</p>	<p>rkozub@tntech.edu (931) 372-3479 or 372-3483 http://web.blomand.net/~rkozub/</p>	<p>Experimental nuclear physics</p>
<p>Rajabali, Mustafa M. Assistant Professor</p>	<p>mrajabali@tntech.edu Box 5051, Bruner Hall 221 (931) 372-3044</p>	<p>Expertise in radiation detection and decay spectroscopy of beta, alpha, gamma and neutron radiation • Detector development for radiation detection including HPGe detectors • Scintillators and silicon detectors Interests: Low energy nuclear physics - Study of the nuclear structure of very rare neutron rich nuclei via decay and laser spectroscopy to understand the collective behavior of the nucleons that make up the nuclei and how the collective behavior is influenced by the abundance of neutrons • Interdisciplinary science - Application of radiation detection methods for research in geography, biology and environmental science</p>
<p>Shriner, John Professor</p>	<p>jshriner@tntech.edu</p>	<p>Nuclear resonance reactions • Statistical properties of nuclear levels</p>

DEPARTMENT OF SOCIOLOGY AND POLITICAL SCIENCE		
NAME	CONTACT INFORMATION	RESEARCH INTERESTS AND EXPERTISE
Maxwell, Lori, Ph.D. Professor and Chair	LMaxwell@tntech.edu	Constitutional law • Judicial process • Gender studies Political culture • Presidential studies
Bower, Erica Assistant Professor	ebower@tntech.edu (931) 372-3208	
Brown, Shelly S. M.A. Senior Instructor	CSBrown@tntech.edu (931) 372-6122	Certified gerontologist • Service learning • Scholarship of teaching and learning
Carlton, Cecil Ph.D. Associate Professor	CCarlton@tntech.edu (931) 372-3812	History of philosophy • Early Christianity • Wittgenstein, Agrarianism
Cook, Nicole M.A. Instructor	NACook@tntech.edu (931) 372-3819	
Cook-Mucci, Wendy M.A. Lecturer	Cookmucci@tntech.edu (931) 372-3208	Gender studies • Medical sociology • Millenials and age cohort analysis • Marriage and family
Estes, Michelle Assistant Professor	mestes@tntech.edu (931) 372-3437	Qualitative research methods • community reentry after incarceration • wrongful convictions • inequality • race • gender
Gunter, Michael Ph.D. Professor	MGunter@tntech.edu (931) 372-3180	Kurds in Turkey and Iraq, Kurdistan, the Kurdish struggle • Middle East Politics • Turkey • Armenians • American foreign policy • China • UK • France • Germany • Soviet Union (Russia) • EU • United Nations • Terrorism • International law • International politics
Harding, Lauren Ph.D. Assistant Professor	LHarding@tntech.edu (931) 372-3817	
Haynes, Ada Ph.D. Professor	AHaynes@tntech.edu (931) 372-3815	Appalachia • Gender • Inequality • Cultural diversity • Critical thinking • STEM Education • Peace

McGauvran, Ronald J. Ph.D. Assistant Professor	RMcgauvran@tntech.edu (931) 372-6296	Quantitative research methods • Causes and consequences of inequality • Political economy • International monetary instruments • Inequality and political participation
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Seiler, Steven Associate Professor	SSeiler@tntech.edu (931) 372-3171	Research Methods • Quantitative & quality data analysis • Program evaluation • Research ethics/IRB • Social psychology • Social technology • Drug use/misuse & recovery • Social justice
Wright, Lauren Ph.D. Assistant Professor	LEWright@tntech.edu (931) 372-3820	Sexual violence • Crime and the media • Theory