School of Education

FACULTY OF TEACHING AND LEARNING
Doctoral Student Handbook

Revised, October 2015
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School of Education Mission Statement

Virginia Tech’s School of Education (SOE) is dedicated to enriching the lives of PK-20 learners, families, and communities through inquiry, leadership and advocacy in a diverse world. We fulfill this mission through the preparation of educational professionals, applied research, and high impact outreach. We seek to promote rigorous inquiry in all aspects of our teaching, research, and outreach, provide the leadership necessary to advance all educational systems, and engage in advocacy that ensures equity and accessibility to quality learning experiences for all members of our diverse and global community. Our mission clearly situates our work within the university's motto "Ut Prosim."

Teaching and Learning Mission Statement

With a commitment to equity, critical inquiry, and reflection, we engage in research, instruction, and outreach to promote learning, serve local and global communities, inspire educators and scholars, and advance the field of education to meet the demands of an ever-changing world.

Welcome and Introduction

Welcome to the Faculty of Teaching and Learning! We are delighted you have chosen to pursue a doctoral study in Curriculum and Instruction or Career and Technical Education with us. We are committed to supporting students’ academic and professional growth as they develop into independent scholars and educational practitioners. This handbook is designed to provide you with pertinent information regarding our programs and the degree completion process, as well as to guide you in a series of reflections regarding your own research and career goals.

Handbook Goals and Purpose

The purpose of this handbook is to:
1. Facilitate reflection regarding your academic identity
2. Explain the trajectory of doctoral degree completion in Curriculum and Instruction or Career and Technical Education
3. Inform you about the organization and faculty of the Faculty of Teaching and Learning
4. Answer frequently asked questions.

The handbook serves as a critical piece in establishing shared goals and responsibilities between doctoral students and faculty. However, this document does not stand alone. For complete information regarding the responsibilities of faculty and doctoral students, as well as detailed information regarding policies and procedures of doctoral study (sometimes referred to as post-master’s), students should consult the Graduate School and School of Education websites.

The Office of Academic Programs (OAP) oversees academic matters for all graduate programs and Dr. Bodenhorn, Director of OAP, signs as Department Head for all graduate forms (540-231-8180;
The Graduate Coordinator, Nancy Nolen, maintains all graduate student files and paperwork regarding technical aspects of your Program of Study (540-231-5348; nanolen@vt.edu).

The Graduate School (www.graduateschool.vt.edu) and the School of Education (www.soe.vt.edu) provide valuable resources for the graduate student. Check with your program advisor about supplemental handbooks and materials. The highlighted sources below serve as useful starting points for new and returning students.

School of Education Graduate Forms or Graduate School Forms:  
http://www.oap.soe.vt.edu/SOEGraduateForms/graduateforms.html or  
http://graduateschool.vt.edu/academics/forms.

Graduate School Expectations for Graduate Study:  
http://graduateschool.vt.edu/expectations
Document outlines expectations for faculty and graduate students alike.

Graduate School Dates and Deadlines:  
http://graduateschool.vt.edu/academics/deadlines
Access information regarding academic calendars, course registration deadlines, and commencement deadlines on this site.
Learning about the SOE and Teaching and Learning

The Faculty of Teaching and Learning is one of three programs within the Virginia Tech School of Education (SOE). The SOE offers Masters of Arts in Education (MA.Ed), Master of Science in Education (MS.Ed.), Doctor of Philosophy (Ph.D.), Doctor of Education (Ed.D.), and Education Specialist (Ed.S.). The following table provides an overview of all the programs and doctoral degrees offered in the SOE.

Table 1. Doctoral Degrees by Programs

<table>
<thead>
<tr>
<th>Programs</th>
<th>Program Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Leadership, Counseling and Research</td>
<td>Counselor Education (EDCO)</td>
</tr>
<tr>
<td></td>
<td>Educational Leadership (EDEL)</td>
</tr>
<tr>
<td></td>
<td>Educational Research and Evaluation (EDRE) (Ph.D., only)</td>
</tr>
<tr>
<td></td>
<td>Higher Education (EDHE)</td>
</tr>
<tr>
<td>Faculty of Learning Sciences and Technologies</td>
<td>Educational Psychology (EDEP)</td>
</tr>
<tr>
<td></td>
<td>Foundation of Education (EDCI)</td>
</tr>
<tr>
<td></td>
<td>Instructional Design and Technology (EDIT)</td>
</tr>
<tr>
<td>Faculty of Teaching and Learning</td>
<td>Curriculum and Instruction (EDCI) Teacher Education with concentrations in:</td>
</tr>
<tr>
<td></td>
<td>Elementary Education</td>
</tr>
<tr>
<td></td>
<td>English Education</td>
</tr>
<tr>
<td></td>
<td>History and Social Science Education</td>
</tr>
<tr>
<td></td>
<td>Music Education</td>
</tr>
<tr>
<td></td>
<td>Integrative STEM Education</td>
</tr>
<tr>
<td></td>
<td>English as a Second Language and Multicultural Education</td>
</tr>
<tr>
<td></td>
<td>Mathematics Education</td>
</tr>
<tr>
<td></td>
<td>Integrative STEM Education</td>
</tr>
<tr>
<td></td>
<td>Career and Technical Education (EDCT) (phasing out in 2020)</td>
</tr>
</tbody>
</table>

Doctoral Degree

Plan of Study (POS)

Every student’s Plan of Study (POS) will depend on program area requirements and student research interests. The POS is a detailed plan of the coursework, including research credits that you will complete before graduating. The document outlines the timeline of program completion and organizes each course under required categories.

Coursework in the doctoral degree programs are organized in 5 categories:

1. Research/Measurement/Statistics
2. Dissertation
3. Foundations
4. Concentration/Applied Studies
5. Cognate

All students are encouraged to take advantage of professional opportunities beyond the minimum requirements of the program of study to maximize their learning experiences. Download a Proposed Plan of Study document: [http://graduateschool.vt.edu/academics/forms](http://graduateschool.vt.edu/academics/forms).

The POS must be submitted to the Office of Academic Programs (OAP) for approval before it is sent to the Graduate School. This should be done before the completion of 18 credit hours beyond the master’s degree. The plan of study will be officially approved by the student’s advisory committee at the qualifying exam and
sent to OAP for processing. The POS represents a mutual agreement regarding course selection, research credit hours, and program timeline.

**Forming a Doctoral Advisory Committee**

Every doctoral student selects a four member advisory committee who will guide and support the student through the doctoral program. Committee members are involved in the design and approval of a Plan of Study (POS), participate in doctoral exams, provide guidance, and assess student progress and accomplishments. Committee members may be faculty from various program areas within Teaching and Learning, the School of Education or the university, and at times outside members.

The Committee chair (or advisor) is responsible for leading all meetings and discussions with committees. The Advisor often recommends advisory committee members who may best support a student’s particular research interests and goals. Consider what each potential committee member brings to your committee. The Teaching and Learning faculty research interests are included in the Faculty List near the end of this handbook.

**Courses in Research and Theory**

The coursework completed by the student in the Curriculum & Instruction Ph.D. program should provide a foundation in educational theories, research methodologies and a focus area in which to begin developing expertise. When combined with research and teaching experiences in the doctoral program, the student is expected to be well prepared as a scholar and educator. In order to meet the doctoral program goals, the student, with recommendations from their committee, will develop a comprehensive Plan of Study that enables the student to successfully complete the dissertation requirement and exit the program as a well-rounded scholar and educator.

Educational research is a cornerstone of doctoral studies and all students must complete foundational coursework and any additional courses that support the student’s goals in the program. Students in the C&I doctoral program should complete courses in quantitative and qualitative research methods as well as additional courses which support the students’ research interests and trajectories. Research courses are designed to help students begin to develop an area of methodological expertise that will allow them to do research independently; programs of study will include courses in both qualitative and quantitative traditions and final decisions are based on students’ goals in consultation with their advisor and committee. Quantitative I is required for those C & I students beginning their doctoral programs in 2015-16.

Educational research is carried out from a particular theoretical perspective. Doctoral students need to be exposed to a variety of theoretical perspectives to build a firm understanding of the range of lenses used in educational research. This will allow them to effectively approach their research and understand the research of others. Furthermore, students need a strong grounding in discipline-specific mid-level theories which give them the expertise to interpret and communicate about the research in their field of interest. Students, with advice from their committee, will develop a clear direction in their Plan of Study toward an area(s) of theoretical expertise. A list of theory courses is included in the Appendix of this handbook.

**Professional Seminar**

All full-time, first-year C & I Ph.D. students are required to enroll in a three-hour professional seminar (EDCI 6014) designed to orient them to doctoral study, provide an introduction to developing literature reviews, and build community among peers. Students in the I-STEM ED program participate in a separate professional seminar due to the hybrid nature of their program. All students register for two hours in the fall semester and one hour in the spring
Example
The following table is to be used as a guide only as it represents a select sample of courses offered throughout the School of Education. Also be aware that the final categorization of courses on your plan of study will depend on program area requirements, committees and whether a course is offered, as schedules do vary. What may qualify as research on one student’s plan of study may be considered foundations on another. Similarly a course categorized as foundations on one may be categorized as a concentration on another. Be sure to consult with your advisor and committee regarding course selection and categorization of courses.

Table 2. Doctoral Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 6944: Professional Seminar (first year only)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDCI 5784: Informal Learning</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EDCI 5784: Discourse in Classrooms and Society</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDCI 6054: Academic Writing for Social Sciences</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>EDCI 5134: Gender and Education</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDCI 5784: Topics Philosophy of Education</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EDCI 5784: Dewey and Pragmatism in Education</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>EDCI 6014: Teacher Education Curriculum</td>
<td>✓★</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDEP 6224: Constructivism and Education</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDEP 6444: Motivation and Cognition</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EDEP 6554: Inquiry in Educational Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDEP 5784: Socio-cultural Difference in Learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDCI 6034: Education and Anthropology</td>
<td>✓★</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDCI 6534: Ethnographic Methods in Educational Research</td>
<td>✓★</td>
<td>✓★</td>
<td></td>
</tr>
<tr>
<td>EDCI 6024: Analysis of Educational Concepts</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>EDEP 6664: College Teaching</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDEP 6114: Cognitive Processes and Educational Practice</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EDCI 5784: Schooling &amp; Disability</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>EDCI 5784: Behavior Management</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDCI 5784: Topics in Diversity &amp; Multicultural Education</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research course offerings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDRE 6504: Qualitative Research I</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EDRE 6524: Qualitative Research II</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EDRE 6605: Quantitative Research Methods in Education</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EDRE 6624: Measuring Theory in Education</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDRE 6634: Advanced Statistics for Education</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDRE 6684: Instrument Development</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDRE 6694: Hierarchical Linear Modeling</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDRE 6744: Mixed Methods Research Design</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✓★: Course offered every two years; ✓: course offered
During the interview process for admission students are often asked if they prefer to pursue a Ph.D., Ed.D., or Ed.S. degree. The following Table 3 describes the differences between these degrees.

**Table 3. Post Master’s Degree Options within the Faculty of Teaching and Learning**

<table>
<thead>
<tr>
<th>Purpose of the Degree</th>
<th>Ph.D.</th>
<th>Ed.D.</th>
<th>Ed.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ph.D.</strong></td>
<td>The Doctor of Philosophy degree is designed for experienced education leaders who aspire to positions as policy analysts, government employees, and/or university faculty with a primary focus on research. The degree includes a curriculum less prescribed than the Ed.D. Many Ph.D. graduates assume research-related positions in universities or community colleges.</td>
<td>The Doctor of Education degree provides the highest professional practice degree available in the field to students who often aspire to leadership positions in public schools or related areas such as professional development. The degree requirements include a prescribed curriculum and in addition the student is expected to complete a major research study resulting in the presentation and defense of a dissertation.</td>
<td>The Education Specialist degree is a post-master’s program for professionals who seek advanced preparation to broaden their understanding of complex professional issues, strengthen their ability to conduct systematic inquiry on their practice, and provide leadership for their institutions.</td>
</tr>
<tr>
<td><strong>Residency</strong></td>
<td>Residency for the Ph.D. requires two consecutive semesters of full-time enrollment (at least 9 credits per semester) to permit a close association between the candidate and advisor and advisory committee. The full summer is considered the equivalent of one academic year semester.</td>
<td>Residency for the Ed.D. requires full-time study (at least 9 credits per semester) during two consecutive semesters (the full summer is considered the equivalent of one academic year semester).</td>
<td>No residency required.</td>
</tr>
<tr>
<td>Degree</td>
<td>Credits Required</td>
<td>Dissertations</td>
<td>Advisory Committee</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Ph.D.</strong></td>
<td>Total of 90 graduate credits</td>
<td>Demonstrates the candidate’s knowledge of the literature</td>
<td>Major advisor and 3 members selected by the students</td>
</tr>
<tr>
<td><strong>Ed.D.</strong></td>
<td>Total of 90 graduate credits</td>
<td>Demonstrates the candidate’s ability to investigate phenomena in educational institutions or service agencies to increase practitioners’ understanding of practical and pressing problems</td>
<td>Major advisor and 3 members selected by the students</td>
</tr>
<tr>
<td><strong>Ed.S.</strong></td>
<td>A total of 60 graduate credits of which 30 credits must be beyond the Master’s degree. The final project demonstrates the candidate’s ability to integrate and apply theoretical concepts in educational contexts. Minimum graduate credits, 60: research and evaluation credits, 6; foundations credits, 6; concentration credits, 12; cognate credits, 3; supervised field study credits, 3.</td>
<td>Major advisor and 2 members selected by the students</td>
<td>Project should demonstrate the ability to integrate and apply theoretical concepts of education in an actual educational context. The project is under the direction of the chair and advisory committee.</td>
</tr>
</tbody>
</table>

For all three degrees, the student and the advisory committee develop and submit a plan of study that is designed on the unique strengths and interests of the individual which will serve as the Qualifying Exam.

See Graduate Catalog for up-to-date statements: [http://graduateschool.vt.edu/graduate_catalog/](http://graduateschool.vt.edu/graduate_catalog/)
**Steps Toward Degree Completion**
The Doctoral program includes a series of examinations, including the qualifying exam, the preliminary exam, the prospectus exam and the final defense. The specific requirements for each exam may vary by program area. With the successful completion of each step, you move closer toward degree completion. The following table illustrates the typical order and description of each exam/procedure.

Table 4. Exam Sequence and Information

<table>
<thead>
<tr>
<th>Exam</th>
<th>Purpose</th>
<th>Forms/S.</th>
<th>Scheduling</th>
<th>FYI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifying</td>
<td>To evaluate subject mastery, determine deficiencies, and develop the plan of study.</td>
<td>Program of Study Results of Qualifying Exam</td>
<td>Upon completion of 18 credits</td>
<td>Exam required by SOE only (not Graduate School)</td>
</tr>
<tr>
<td>Preliminary</td>
<td>The exam is typically undertaken when all the courses on the Plan of Study have been completed. Successful completion results in the transition from doctoral student to doctoral candidate.</td>
<td>Request to Admit Candidate to Preliminary Exam</td>
<td>Completion of courses</td>
<td>Exam required by SOE and Graduate School</td>
</tr>
<tr>
<td>Prospectus</td>
<td>Proposal for the dissertation.</td>
<td>Schedule Dissertation Prospectus Examination/Abstract</td>
<td>Determined by student and committee</td>
<td>Exam required by SOE (not Graduate School)</td>
</tr>
<tr>
<td>Defense</td>
<td>FormaM.A.l presentation of dissertation research results. Committee chairs must first approve the dissertation. Committees must receive a printed or electronic copy of the dissertation for review and be able to indicate that dissertation is ready for defense before students request a final examination date.</td>
<td>Request to Admit Candidate to Final Exam, Dissertation Approval Form, Final Exam Report Application for Degree Form</td>
<td>The final version approved by the student's Advisory Committee must be submitted electronically as an ETD to the Graduate School <em>no later than two weeks</em> after the successful completion of the final examination.</td>
<td></td>
</tr>
</tbody>
</table>
Additional information related to scheduling exams includes:

- Scheduling examinations: Complete required paperwork prior to exam by deadline.

- Written exam papers should be submitted to committee three weeks before exam date.

- Exams will be scheduled only on days when classes are in session and not during exam week or breaks. Exceptions will be granted in extreme circumstances only at the request of the advisor.

- Committee members may attend exams virtually. Any costs involved must be paid by the student.

- Schedule Preliminary and Final Exams through the Electronic Signature System at least two weeks prior to the exam date.

Source: [http://www.soe.vt.edu/idt/Programs/Doctoral/doctoral.html](http://www.soe.vt.edu/idt/Programs/Doctoral/doctoral.html)
Dissertation Formats

The dissertation format depends on a variety of factors, such as the type of research questions, methods, and area of inquiry. In order to make positive scholarly contributions, it is important to follow the research customs and styles of your particular area of concentration. Consult with your advisor and doctoral advisory committee to determine the appropriate format for your study.

Two formats are accepted by the Graduate School and School of Education:

**Standard** five- to seven-chapter dissertation includes chapters devoted to topics such as the rationale, literature review, theoretical framework, research methods, data analysis, results, and recommendations.

or

**Manuscript** presents the research in an article or book chapter format. The following outlines the criteria and requirements for the manuscript dissertation:

1. The manuscript format for dissertation/thesis shall consist of at least two manuscripts (for Doctoral degree). The content of the manuscript(s) should be based upon research done at Virginia Tech. The manuscript(s) can be previously published, to be published, or in preparation for submission.

2. The graduate student is to be the major contributor and writer of the manuscript(s), as usually represented by sole author. For multiple authorships the contribution of each author is to be detailed in the Introduction or separate Attribution section.

3. The graduate student is to provide the Graduate School with a letter of copyright release for previously published and copyrighted material.

4. Whether previously published or to be reviewed, the manuscript shall be formatted to fit within the margins acceptable by the Graduate School and satisfy all requirements for submission in ETD format.
Coursework and Plan of Study

How and when do I construct a plan of study POS?
You will construct the plan of study with your advisor within your first year of doctoral study. Every doctoral student will have a unique and individualized plan of study based on his or her research interests, as well as program area requirements and expectations. After constructing your plan of study with your advisor, you will share it with your committee members at the qualifying exam. You will then submit the plan of study to the OAP in War Memorial, where it will be approved by the OAP Director. The OAP will then submit the plan of study to the Graduate School for final approval.

How do I sign-up for classes?
You may access a list of courses on the Timetable of Classes on:
You may adjust, drop or add classes using
Always check for times and deadlines when classes are up for accessing on:
https://banweb.banner.vt.edu/ssb/prod/HZSKVT_SC_P_DispRequest

Students pursuing a doctoral degree in education should consider class offerings with education prefixes, such as EDCI, EDCT, EDEL, EDEP, EDIT, and EDRE. Depending on program area, cognate and concentration areas, courses other than education may be included on the POS.

Programs are offered through a variety of delivery methods: on-campus, distance, online, field based, and hybrid courses. Regardless of course delivery method, students should always work closely with advisors to determine which courses should be included on their POS.
FAQs: Advisors and Doctoral Advisory Committee Members

*What factors should I consider when selecting a doctoral advisory committee?*
You should consider faculty research interests and areas of expertise when forming a committee. It is important to choose committee members who can best support your individual goals. Committee members are expected to work together collaboratively and professionally while building positive working relationships with their students. Students can benefit from faculty members who provide opportunities to be collaboratively involved in research projects or co-teaching relationships.

*Can I change advisors and/or doctoral advisory committee members?*
Changes in a student’s advisory committee will be granted only on approval of all committee members, new and old, and on approval of the Associate Director, Office of Academic Programs: [http://graduateschool.vt.edu/forms/academics/Change_of_Committee-Advisor.pdf](http://graduateschool.vt.edu/forms/academics/Change_of_Committee-Advisor.pdf). In the case that one or more members do not approve the change in the membership of the advisory committee, an appeal may be made by either the student or a faculty member to the GPD. If the director considers the appeal to have merit, he/she may then ask the Graduate School for an exception to all members signing the form.

FAQs: Doctoral Exams/M.S. and Doctoral Forms/M.S.

*What is the timeline for doctoral exams?*
There is no standard timeline. The timeline for each student depends on that student’s POS.

*What is the exam format?*
The Advisor and the nature of the program areas determine the format for each exam.

*How are exams scheduled?*
Dates for each exam are determined with the advisor. One way to get a consensus for all committee members is to use web tools such as [www.doodle.com](http://www.doodle.com). Once your advisory committee agrees on a date, you must submit the relevant Exam Request form to the Office of Academic Program in War Memorial 3 weeks before the requested exam date. It is essential to work weeks ahead in order to submit forms on time.

FAQs: Dissertation Process

*How long do I have to complete the dissertation process?*
You will determine the dissertation timeline when you prepare the Plan of Study with your advisory committee. Changes may be made as necessary, and your advisor and committee members should be involved.

*When should I formulate a research topic and research question(s)?*
You should begin formulating a topic as soon as you begin your doctoral study. With each class that you take, you will learn more about teaching and learning and develop your research interests. Begin talking with your advisor and doctoral advisory committee about possible research topics and questions throughout your first year and beyond.
Where can I access information on student services and resources?
Graduate School Student Resources: http://graduateschool.vt.edu/life/resources

School of Education Student Resources:
http://www.soe.vt.edu/Students/Perspective_Students/ProspectiveStudents.html
Graduate School Honor System

The Graduate Honor Code establishes a standard of academic integrity. The code demands a firm adherence to a set of values and is founded on the concept of honesty with respect to the intellectual efforts of oneself and others.

Compliance with the Graduate Honor Code requires that all graduate students exercise honesty and ethical behavior in all their academic pursuits here at Virginia Tech, whether these undertakings pertain to study, course work, research, extension, or teaching.

See more at: http://ghs.graduateschool.vt.edu/#sthash.rIEUySZa.dpuf

Virginia Tech Principles of Community

The "Virginia Tech Principles of Community" were affirmed by the board of visitors March 14, 2005, and signed by eight university organizations.

Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world community. Learning from the experiences that shape Virginia Tech as an institution, we acknowledge those aspects of our legacy that reflected bias and exclusion. Therefore, we adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

- We affirm the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.
- We affirm the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
- We affirm the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
- We reject all forms of prejudice and discrimination, including those based on age, color, disability, gender, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
- We pledge our collective commitment to these principles in the spirit of the Virginia Tech motto of Ut Prosim (That I May Serve).

Ben J. Davenport Jr., Rector, Board of Visitors
Charles W. Steger, President
W. Samuel Easterling, President, Faculty Senate
Sue Ellen Crocker, President, Staff Senate
Sumeet Bagai, President, Student Government Association
Myrna Callison and Yvette Quintela, Co-Vice Presidents, Graduate Student Assembly
Kimball "Jay" Reynolds, President, Virginia Tech Alumni Association
Ray Plaza, Chair, Commission on Equal Opportunity and Diversity
The Conceptual Framework

We believe that schools at all levels (i.e., PK-12, community college and the university level) are organizations created to promote and support learning for all members of the community. Consequently, Virginia Tech programs are concerned first and foremost with learning for all members of the community, i.e., our candidates, their students, and ourselves as faculty. This community-based perspective requires full active participation of all members resulting in a reciprocity and mutuality of purpose and outcomes. Moreover, we see this learning process as one that develops over time, at different rates and depth of understanding. This developmental perspective invites co-learning and mentoring among the community members, forging strong bonds of affiliation and respect.

There are four cornerstones, that is, core beliefs, which ground our efforts to create programs centered on
learning for all: diversity, research, content, and technology. Together these core beliefs serve as the cornerstone for the foundation upon which we build a variety of programs. On this foundation, the four program essentials described below provide the structural framework for individual programs. These program structures may take on somewhat differing appearances, but the cornerstones remain the same. The first cornerstone comprises the multiple permutations of diversity, that is, gender, race, ethnicity, sexual orientation, religion, class, age (generational), language, disabilities, and geography that contribute to an enhanced learning environment for all participants. Research, the second cornerstone, provides the current knowledge about teaching and learning upon which our programs are built. The third cornerstone is content knowledge, i.e., a deep understanding of the concepts and principles of the discipline, which serves as the basis for all teaching and learning. And the last cornerstone is technology, which supports the teaching and learning process.

Embedded within the cornerstones of our core beliefs are the knowledge, dispositions, and skills that give rise to the four essentials that shape the structure of Virginia Tech's professional education programs. The four essentials defining our programs are that they are community-based, inquiry-based, standards-based, and practice-based. The programs are community-based in that candidates learn and develop their knowledge, skills, and dispositions in communities of learners comprised of faculty, candidates, and school partners. In these learning communities, candidates engage in inquiry to seek answers to problems identified in their practice. Furthermore, programs are designed to meet state and national content and performance standards. And lastly, it is in the context of schools that pedagogical knowledge and content knowledge intersect in practices that result in student learning.

**Programs are Community-based**

The vision of learning community that guides Virginia Tech programs includes a set of beliefs, attitudes, values and operating procedures that emphasize the collaborative preparation of school personnel through university-public school partnerships. Programs for the preparation of school personnel at Virginia Tech are characterized by a commitment to the importance and value of learning communities. Our notion of community has been informed by various scholars such as Ernest Boyer (1995), Jerome Bruner (1997), Patricia Cross (1996), Palmer Parker (1997), Philip Schlechty (1992), Peter Senge (1994), Thomas Sergiovanni (1999), and others who have delineated the nature and ethos of learning community. While each of these scholars has a particular vision of learning community, together they share the importance of common goals, co-participation, mutuality, and respect.

Professional education programs at Virginia Tech are built on a belief that learning is enhanced when it occurs within a community of people who share common goals including a strong commitment to support each other in making meaning, that is to say, creating shared meanings. Virginia Tech programs for the preparation of school personnel build on recent thought, theory and research about the learning process that suggests meaning is socially constructed (Richardson, 1999). In other words, meaning is created rather than discovered. Meaning-making occurs in groups (communities) of people who are engaged in intellectual interaction for the purpose of learning (Cross, 1996, p. 3).

At the heart of our quest for community is our commitment to diversity. We believe effective learning communities are inclusive. Diversity is an especially important aspect of inclusive learning communities because variety in background experiences and points of view are essential to informed discussion. Further, members of strong learning communities have positive intentions for the betterment of society generally and, in the case of educators, for the betterment of schools in particular. Community members collaborate in part because such activities are valuable for creating productive connections among participants that are important for the development of shared meanings.
Learning communities devoted to schooling value the knowledge of all participants, including school-based practitioners and their students who bring their own unique experiences and insights to issues under study. Members of these communities regard learning as a search for meaning that is pursued through a process of inquiry. Learning communities also eschew hierarchies among participants, recognizing that all members of school-related communities are knowledgeable in their own right about the learning process, about teaching, about schools and about schooling because each person has had various personal experiences that are relevant and germane for meaning making (Moll & Greenberg, 1990). Such communities draw on the diversity represented among their members and replace competitiveness with collaboration. Authentic and effective learning communities involve all learners in an active search for meaning rather than passive absorption of knowledge that is dispensed by authorities.

The cohort nature of the 5th-year and 5-year initial preparation programs and the off-campus advanced programs develops strong learning communities. In these programs, candidates move through key learning experiences as intact groups, which creates numerous opportunities for collaborative learning in courses as well as in the school-based learning communities where they have their field experiences. In the 4-year programs there are also common experiences that bring those candidates together. Technology has also helped us both strengthen and enlarge our learning communities as we connect within and across cohorts and with faculty and students at school sites. (e.g., English education candidates to middle school students in chat rooms to discuss adolescent literature they have read in common; a computer-mediated community of learners that links candidates in educational psychology classes to classroom teachers to share analysis of video cases and discuss the ways that theory and practice work together to create successful learning environments for students). Furthermore, faculty and candidates engage in school-based learning communities during internships experiences.

The beliefs of the professional education programs are compatible with a major university-wide initiative that is founded on the concept of learning communities to transform the larger enterprise as well. We also strive to create an environment in which individuals may develop a more thorough understanding of themselves and their world. This assertion is deceptively simple, because effective education requires combining multiple intellectual, social, emotional, and physical learning experiences. Therefore, we do not learn a way of life and ways of deploying mind unassisted, unscaffolded, naked before the world. Rather, it is through the give and take of talk, the active discourse with other minds, that we come to know about the world and about ourselves (Bruner, 1996). By creating learning communities wherever appropriate in the university, we are combining the knowledge strengths of the institution with an extraordinarily effective approach to teaching and research. Few other colleges and universities in the learning communities movement have cast the net this wide.

**Programs are Inquiry-based**

Members of the Virginia Tech professional education learning community are committed to an inquiry-based approach to learning (Lampert, 1999). We believe an inquiry-based approach allows participants to build personal and group understanding of content, generates new knowledge that encourages development of teaching and learning theory, and improves teaching practice as well as a disposition to go on learning (Fullan & Hargreaves, 1992; Schön, 1987). Graduates of our programs are active problem-solvers who have the knowledge, skills and dispositions required to identify real world problems/issues and propose, implement and evaluate the effectiveness of their own answers to questions that emerge from their practice (Cochran-Smith & Lytle, 1999). Such inquiry is integrated into both initial and advanced programs as teacher inquiry, teacher as researcher, problem-based learning, and action research.

Our commitment to an inquiry-based approach for preparing professional educators is evident in the courses
candidates take as well as in the strong field-based components of their program. These experiences are designed to help candidates develop the knowledge, skills and dispositions necessary for conducting inquiry. Candidates not only acquire knowledge of the tools and processes they will need to conduct inquiry throughout their program, they are also challenged in their learning community to examine various ways of knowing and to appreciate multiple representations of knowledge (Gardner, 1993; John-Steiner, 1997). Candidates learn how to formulate problems, collect data, reduce data for analysis, interpret and transform data to enhance their understanding of theory and practice. Supervisors and faculty alike model the inquiry approach and offer encouragement as well as feedback that support these important dispositions toward teaching as inquiry.

Programs are Standards-based
The practice of professional educators is grounded in knowledge of their disciplines, of pedagogy, of learning, and of schools and schooling (e.g., Shulman, 1987; Reagan, 1993; Wilson & Berne, 1999). Therefore, our programs are committed to content and performance standards. To articulate these standards within and across our learning communities, we have grouped the principles into five ideas: a commitment to all students and their learning, a knowledge of content and how to teach that content, ways of managing and assessing student learning, an inquiry approach to teaching, and importance of community in the education enterprise. These ideas are those on which the National Board for Professional Teaching Standards are based as well as those into which INTASC principles can be grouped.

Because we believe that the basis for good pedagogy is a broad and deep knowledge of the discipline(s) being taught, we have moved the majority of our initial preparation programs to the graduate level so that candidates can not only immerse themselves in their major discipline but also have opportunities to explore other related areas of interest. Candidates in these programs bring not only strong content preparation to their teacher preparation courses but diversity as well because frequently they come to teacher education after other experiences. Additionally, in initial preparation and advanced programs with national professional preparation standards and discipline or content area-related standards, those standards are aligned with INTASC principles and Virginia program standards as well. Among the Virginia standards for state-approved programs is the requirement that candidates know the Virginia Standards of Learning for their discipline and how to facilitate their students' accomplishment of those standards.

The ISTE guidelines for technology serve to guide our integration of technology into curriculum and field-based experiences across the preparation programs. Additionally, the Virginia technology standards articulate what candidates must be able to do regarding technology. We value the contribution that technology can bring to teaching and learning, and strive to develop the skills of our candidates so that they can become full partners in any educational endeavor they enter.

Programs are Practice-based
With respect to teaching, learning is a complex psychological and social process that is promoted by knowledgeable, reflective, caring and skillful practitioners (Elliott, 1995; Hawkey, 1997). It is this commitment to pedagogical knowledge and the connection of pedagogy to the context of schools that infuses the "practice" in all programs (Ball & Cohen, 1999). By developing this practice-based theory of education, candidates are grounded in the complexities of life in schools and the needs of the children whom they must educate.

Virginia Tech professional education programs are committed to introducing and exploring strategies that school personnel can use to promote student learning. Teaching strategies provide teachers with a means to frame their knowledge about methods of instruction, learners, and subject matter. Brophy's (1997) notions about
"Active Learning" highlight the ways Virginia Tech graduates show that they know how to help their students construct usable knowledge through effective planning, use appropriate classroom management techniques, provide instruction that is differentiated according to the needs of individual learners (including children with special needs), assess/diagnose student needs and fully evaluate outcomes. However, because we also believe that educators learn from their practice when they inquire sensitively and systematically into the nature of learning and the effects of teaching, these educators understand the complexities of classrooms and resist simplistic formulas for teaching and learning (Connelly & Clandinin, 1988; Darling-Hammond, 1999; Dewey, 1929).
<table>
<thead>
<tr>
<th>Teaching and Learning Faculty</th>
<th>Program Area(s)</th>
<th>Email</th>
<th>Research Interests</th>
</tr>
</thead>
</table>
| Dr. Amy Price Azano           | Adolescent Literacy Education        | azano@vt.edu         | • Adolescent literacy  
• Rural education  
• Critical pedagogy of space |
| Dr. Mary Alice Barksdale       | Elementary Education                 | mbarksda@vt.edu      | • Elementary literacy studies  
• Literacy teacher education  
• Literacy education in developing countries |
| Dr. Bonnie S. Billingsley      | Special Education                    | billingsley@vt.edu   | • Special education  
• Leadership for inclusive schools  
• Teacher education, induction and retention |
| Dr. Jennifer M. Bondy          | History and Social Science Education | jmbondy@vt.edu       | • Gender, immigration, and education  
• Transnationalism and cultural citizenship  
• Equity studies |
| Dr. Brenda Brand               | Science Education                    | bbrand@vt.edu        | • Sociocultural factors influencing students’ participation in science, technology, engineering and mathematics |
| Dr. Jeremy Ernst               | Integrative STEM Education/Technology Education | jvernst@vt.edu      | • At-risk learners in STEM Education  
• Nature and purpose of teaching in a standards-based setting  
• Integration of multi-media and digital technologies  
• Citizenship education, disability studies, and parental advocacy |
| Dr. George Glasson             | Science Education                    | glassong@vt.edu      | • Ecological sustainability, culture, and education  
• International education |
| Dr. David Hicks                | History and Social Science Education | hicks@vt.edu         | • Nature and purpose of teaching in a standards-based setting  
• Integration of multi-media and digital technologies  
• Citizenship education, disability studies, and parental advocacy |
| Dr. Betti Kreye         | Mathematics Education | bkreye@vt.edu                | • Professional development for K-12 mathematics teachers & math specialists  
• The improvement of student learning through best instructional practices |
|------------------------|------------------------|-----------------------------|--------------------------------------------------------------------------------|
| Dr. Heidi Anne Mesmer  | Literacy/Integrative STEM Education/Elementary Education | hamesmer@vt.edu             | • Text-reader matching  
• Phonics and word study  
• Struggling readers |
| Dr. Joseph Mukuni      | Career and Technical Education | mjoseph7@vt.edu             | • Portability of technical skills across occupations  
• Trends in the world of work  
• Labor market skill gaps  
• International best practices in workforce development  
• Demand responsiveness of CTE programs  
• CTE policy formulation  
• Indigenous knowledge systems |
| Dr. Kelly A. Parkes    | Music Education        | kparkes@vt.edu              | • Higher education pedagogy  
• Assessment in applied music  
• Music teacher education |
| Dr. Bill Price         | Career and Technical Education | wprice@vt.edu              | • Zambian Vocational Teacher Education  
• Zambian culture and educational systems |
| Dr. Takumi Sato        | Science Education      | takumi@vt.edu              | • Role of race and racism in the science experiences for youth of color  
• Youth participatory action |
<p>| Dr. Trevor Stewart     | English Education      | <a href="mailto:ttstew@vt.edu">ttstew@vt.edu</a>              | • Influence of educational policies and curriculum mandates on teacher autonomy and sense of self-efficacy in the English classroom |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Email</th>
<th>Research Interests</th>
</tr>
</thead>
</table>
| Dr. Gresilda A. Tilley-Lubbs| English as a Second Language and Multicultural Education | glubbs@vt.edu         | - Critical pedagogy  
- Qualitative research  
- Ethnography, auto-ethnography  
- Service-learning in teacher and multicultural education  
- Transnational issues affecting education for immigrant children  
- Whiteness, power, and privilege |
| Dr. Katy Ulrich            | Mathematics Education               | culrich@vt.edu         | - Mathematical learning in middle grades  
- Radical constructivist theory  
- Policy deconstruction |
| Dr. John G. Wells          | Integrative STEM Education/Technology Education | jgwells@vt.edu         | - Cognitive demands addressed through technological and engineering design based teaching and learning  
- Instructional strategies for design based biotechnology literacy  
- Integrative pedagogical practices among STEM education areas  
- Instructional design and technology |
| Dr. Jay Wilkins            | Mathematics Education               | wilkins@vt.edu         | - Mathematical beliefs and attitudes  
- Probability and statistics  
- Quantitative literacy  
- Children’s development of fraction concepts |
| Dr. Thomas O. Williams     | Special Education                   | thwilli1@vt.edu        | - Test development  
- Psychometrics  
- Effects of affective and cognitive arousal on behavior problems and intelligence |
### Key Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Contact</th>
<th>Why?</th>
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<tbody>
<tr>
<td>Library [every college has an expert in their area]</td>
<td>Stephanie Metko</td>
<td>The library resources are many and continue to grow to suit doctoral student needs. Never hesitate to ask them for ANY type of library help. Become familiar with each floor and the people.</td>
</tr>
<tr>
<td><a href="http://www.lib.vt.edu">www.lib.vt.edu</a></td>
<td><a href="mailto:smetko@vt.edu">smetko@vt.edu</a></td>
<td></td>
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<tr>
<td></td>
<td>540-231-5475</td>
<td></td>
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<tr>
<td>The Writing Center</td>
<td></td>
<td>For all your writing needs and editing purposes. They are GREAT!!</td>
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<tr>
<td></td>
<td>540-231-5436</td>
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<tr>
<td>NLI: Networked Learning Initiatives</td>
<td>Main Office</td>
<td>Provide FREE workshops and trainings in groups and one-on-one on all technology supports: organizing your dissertation to photoshop and even web design. You need to make a poster – they will help you. You need to create a website showcasing your work on Scholar – they will help.</td>
</tr>
<tr>
<td><a href="https://nli.tlos.vt.edu/">https://nli.tlos.vt.edu/</a></td>
<td>1220 Torgersen</td>
<td></td>
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<tr>
<td></td>
<td><a href="mailto:nli@vt.edu">nli@vt.edu</a></td>
<td></td>
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<td></td>
<td>540-231-7636</td>
<td></td>
</tr>
<tr>
<td>Education Technology Lab</td>
<td>220 War Memorial Diana Wu</td>
<td>Your first line of help for all technical needs, renting equipment for class use, printing posters, making powerful presentations. They are also the technicians for all War Memorial classrooms.</td>
</tr>
<tr>
<td><a href="http://www.oit.soe.vt.edu/">http://www.oit.soe.vt.edu/</a></td>
<td><a href="mailto:ywu80@vt.edu">ywu80@vt.edu</a></td>
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<tr>
<td></td>
<td>540-231-3753</td>
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<tr>
<td>Computing at VTech</td>
<td>You can ask questions/submit report or request at:</td>
<td>Answers to all your computing services antivirus problems and security issues</td>
</tr>
<tr>
<td></td>
<td>540-231-HELP [4357]</td>
<td></td>
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<tr>
<td></td>
<td>also known as 4help.vt.edu</td>
<td></td>
</tr>
<tr>
<td>220K War Memorial Hall</td>
<td>Graduate Assistants run the lab [supervised by EDRE faculty members]</td>
<td>Provides consulting services and access to computer resources. Consultation is available relating to research and evaluation design, instrument development, and quantitative and qualitative data analysis. See site for statistical, measurement and qualitative packages available and supported by the lab.</td>
</tr>
<tr>
<td><a href="http://www.soe.vt.edu/edre/EDRE_Lab/edre_lab.html">http://www.soe.vt.edu/edre/EDRE_Lab/edre_lab.html</a></td>
<td>540-231-9726</td>
<td></td>
</tr>
<tr>
<td>GLC: Graduate Life Center</td>
<td>31H Graduate Life Center, 155 Otey St</td>
<td>Promote graduate education and graduate community. Functional areas such as a café, study areas, and rooms to hire. GLC is a hub for graduate student life.</td>
</tr>
<tr>
<td><a href="http://www.graduatelifecenter.vt.edu">www.graduatelifecenter.vt.edu</a></td>
<td>540-231-0413</td>
<td></td>
</tr>
</tbody>
</table>
Office Contacts:

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APPENDIX: THEORY-RELATED COURSES

This list was compiled to show a range of theory-related courses available at Virginia Tech. There are numerous options in the School of Education and in other departments in the College of Liberal Arts and Human Sciences. Please note this list is not exhaustive and other departments (e.g., psychology) also offer theory-related courses. It is possible some of these courses may not be offered or they may have been discontinued. Permission may be needed to enroll in some of these courses, especially those at the advanced graduate level.

FACULTY OF TEACHING AND LEARNING

EDCI 5784: Introduction to Critical Pedagogy. This graduate seminar will introduce the ideas, theories, and practices that together constitute the field known as critical pedagogy. We will read the work of several authors whose contributions inform the field in significant ways. These writings will guide the exploration of some key themes within critical pedagogy:

• the relationship of education to power;
• issues of difference and pluralism;
• the meaning of teaching for equity and access for all students;
• the social construction of knowledge;
• dialogic relations in the classroom;
• teaching for social justice; and
• the moral and ethical dimensions of education.

The class will create a third space of freedom to engage, discuss, and examine critical issues that shape educational practice and subsequently society as a fluid entity. Class participants will react to the readings to explore conundrums that interest, perplex, concern, and puzzle them.

EDCI 5784: Critical Autoethnography. This graduate seminar will provide an opportunity to explore feelings, personal thoughts, and biases faced by researchers when engaging in the study of any topic of interest. Students will read significant and foundational works by leading scholars in the fields of autoethnography and critical pedagogy. There will also be ample opportunity for critical autoethnographic writing and feedback. Much of the course will be conducted in a writer’s workshop format with integrated readings, writing, and discussion. The ultimate goal will be for class members to produce manuscripts for submission to an appropriate academic journal. It is recommended that students take Introduction to Critical Pedagogy prior to taking this course.

EDCI 5214: Linguistic Theory and Instruction in Reading and Written Expression. Studies the syntactic structure of questions and their function and application to selected questioning strategies in reading and writing; explores ideas for the development of a systematic approach to teaching writing in conjunction with reading; discusses the use of stylistic devices and grammars in a reading and writing program using basal readers and children's literature.

EDCI 5174: Informal Learning and Youth. Overview of learning theories and empirical research on the influence of home, community, and museums upon learning in K-12 schooling. Practical application through visits to museums and after school programs.

EDCI 5304: Assessment for K-12 Literacy Instruction. Examines theory and practice of assessment in literacy education. Explores the range of current paradigms, including those associated with assessment as measurement, as procedure, and as inquiry. Focuses on the reciprocal relationship between assessment and instruction in literacy practices. Explores a variety of assessment practices and their appropriateness for use with a diverse student population.

EDCI 5414: Theory and Practice for Early Literacy Instruction (PK-3). Examines language development and early literacy teaching and learning. Explores a wide range of current theories and practices including phonics based and meaning based approaches to teaching. Attends to how curriculum, instruction, and assessment reflect differing agendas for literacy and schooling and different definitions of literacy.

EDCI 5424: Theory and Practice in Content Literacy Instruction (3-6). Focuses on comprehension and literacy development in middle grades. It explores a wide range of paradigms of comprehension and attends to how curriculum, instruction, and assessment are conducted within each paradigm. Special attention is given to socio-cultural and critical perspectives within literacy pedagogy.

EDCI 5454: Teaching Composition. Investigation of theory and research into pedagogy in teaching composition in K-12 settings. Consideration of the reasons K-12 students write, the ways they learn to write, and the genres and forms they utilize.

EDCI 5464: Adolescent Development. Advanced study of the physical, cognitive, social, and emotional development of the adolescent with emphasis on theoretical issues, research findings, and application of theory and research. Implications for education are highlighted.

EDCI 6024: The Analysis of Educational Concepts. Systematic introduction to the study of contemporary philosophy of education, indicating ways in which philosophy is used to analyze educational aims, content, methods, and values.

EDCI 6044: Classroom Discourse. Overview of sociolinguistic theory to describe spoken language in the classroom. How discourse relates to learning as well as the establishment and maintenance of social relationships in schools.


EDCT 6614: Evaluation in Career and Technical Education. Study of the theory and application of evaluation to career and technical education. Major emphasis on the unique requirements of program, personnel and student evaluation as specified in Federal and State legislation and regulations. National and state evaluations of career and technical education are assessed.

FACULTY OF LEARNING SCIENCES AND TECHNOLOGY

EDEP 5114: Learning and Cognition Psychological theories and models which serve as a basis for educational models and practice. Emphasis on conceptions of learning and cognitive process. Pre: Graduate standing.
**EDEP 5154: Psych Foundations for Teachers**
Emphasizes applying human learning and developmental theories to classroom settings including school learning theories, child and adolescent cognitive development, instructional strategies, classroom management, student motivation, and learning assessment strategies. Graduate Standing Required. Admission in a graduate teacher education program or instructor permission required.

**EDEP 5184: Sociocultural Influences on Learning and Instruction**
Theories and empirical research on the influence of language, semiotics, dialogue, manipulatives, and social groups on cognition. Practical application through observation of classrooms and visits to science museums. Pre: Graduate standing

**EDEP 5194: Research Assessing Student Achievement**
Theoretical, empirical and practical foundations of classroom assessment of student achievement, including measurement theory, assessment construction, and developing the skills to be a teacher researcher. Emphasis on norm and criterion reference tests, selection and supply assessment items, outcome based assessment, alternative assessment strategies, and teacher as researcher design. Graduate standing required.

**EDEP 6114: Cognitive Processes**
Investigates complex human learning from the perspective of cognitive/information processing theories. Emphasizes methods of investigation in cognitive science as well as strategies for using a cognitive orientation in educational settings

**EDEP 6224: Constructivism and Education**
Philosophical, theoretical, and empirical foundations of the broad field of constructivism, including the limits of epistemology and ontology, the determination of truth and reality, and applications to education and everyday life. Emphasis on radical constructivism, social constructivism, symbolic interactionism, social constructionism, and cognitive constructivism, and their applications to education.

**EDEP 6334: Multimedia Cognition**
Theoretical, empirical and practical foundations of human cognition within multimedia learning environments. Emphasis will be on fostering complex cognition within multimedia environments through the careful design, development and implementation of multimedia instruction

**EDIT 5154: Theoretical Foundations of Technology-Enhanced Learning**
Theoretical perspectives on learning, cognition, and instruction as related to technology-enhanced learning (TEL) from Pre-K to college. Concepts and principles for formal and informal learning and design instruction in a variety of settings using technology. Pre: Graduate standing.

**EDIT 5164: Design for Learning**
Course addresses the systematic design of learning experiences and environments. Emphasizes the use of instructional design (ID) models and predominant learning theories (behaviorist, cognitive, and constructivist) to create effective learning experiences. Explores models, principles, and processes used to support learning in both formal (e.g., education, industry) and informal learning environments. Students will design learning experiences employing the models, principles, and processes.
EDIT 5234: Introduction to the Learning Sciences
Foundational approaches to the new science of learning, from a broad range of perspectives. Interdisciplinary science of learning; current theories of learning; research design and analysis methods resources, and designs for new learning environments. Pre: Graduate standing.

EDIT 5274: Foundations of Instructional Design and Technology
Philosophical, theoretical, technological, and ethical underpinnings of the Instructional Design and Technology field. Development of the field, tenets, and opportunities for professionals in the area. Pre: Graduate standing

EDIT 5534: Applied Theories of Instructional Design
Emphasis is on translating theory to the practice of instructional systems development. Examines the application of foundational theories of instructional design (systems theory, communication theory, learning theories, and instructional theories) to the development of technology-based learning materials.

EDIT 5594: Topics in Learning Environment Design and Development
Integration and application of theories, principles, practices and skills in a variety of authentic settings. Clinical approach to project development using design and development teams to produce effective learning solutions for clients. May be repeated for a maximum of 9 hours.

EDIT 6334: Applied Theories of Learning
Application of learning and instructional theories to the practice of designing learning environments and particularly the development of technology-based learning materials.

FACULTY OF LEADERSHIP, COUNSELING AND RESEARCH

EDCO 5234: Group Counseling. Introduction to group counseling theory and practice. Emphasis on application of group counseling principles to practical settings. In a laboratory setting, students receive feedback about their personal behavior in a group and supervised practice in the design, implementation, and evaluation of a short term group counseling project.

EDCO 5364: School Counseling. Theory and practice of school counseling at the elementary, middle, and high school level, and introductory skills for those settings. Provides understanding of basic services performed by the school counselor; developmental characteristics of the age groups served; ethical, legal and societal issues that affect school counselors; special education terminology; techniques useful in school counseling; and sources of materials available for educational and career counseling at various school levels.

EDCO 5424 (HD 5424): Life Span Development. Stages of individual development as they occur in the context of the family life course. Overview of current developmental theories. Impact of race, gender, and class on cultural views of developmental norms.

EDHE 5314: College Student Development Theory (offered every fall). Acknowledging the growing diversity and complexity of student populations and college environments, and the ever-shifting landscape of higher education in the United States and internationally, students in this course will develop the skills necessary to examine, understand, apply, and critique student developmental theory and its role in student affairs and higher education practice.

EDHE 6304: Theories of Educational Organizations. Study of educational organization theory and behavior. Emphasis will be given to understanding institutional structures and cultures in their educational, social, economic, and political contexts with a view toward organization improvement, development, and reform.
EDRE 6624: Measurement Theory in Education. Methods and theories of estimating and enhancing test score characteristics, particularly reliability and validity of aptitude and achievement tests. Problems associated with test construction, use, and score interpretation will be emphasized.

EDRE 6704: Evaluation Methods in Education. Principles of evaluation with emphasis on practices applicable to a variety of educational settings. The theoretical and philosophical bases which lead to alternative methodologies. Design and measurement alternatives are considered within the jurisdictionary, theoretical, and philosophical contexts.

EDRE 6784: Advanced Issues in Qualitative Research. Provides advanced treatment of important theoretical and methodological topics in the contemporary qualitative literature and in the ongoing development of qualitative methodology. Emphasis is placed on addressing both theoretical issues and issues of research praxis. Topics covered vary from term to term.

Other Theory-Related Options at Virginia Tech

ASPECT

ASPT 5214 (HIST 5214): Topics in Global History: A variable content course exploring historiographical approaches to the study of global history from the classical age to the present. Special emphasis on chronological frameworks, histories and theories of globalization, and implications of new scholarship in global history for research and teaching.

ASPT 5244: Constitutionalism in Theory and Practice The course investigates theories and practices of constitutionalism, both within the United States and more generally. It frames a number of questions about what characterizes constitutionalism as a distinctive theory of politics, while also examining the constitution, maintenance, change, and destruction in practice of constitutional orders, constitutions, constitutional institutions, and other constitutional norms.

ASPT 5414: Topics in Cultural History and Theory. A variable content course exploring the intersection of cultural theory and the discipline of history. Introduces important theoretical contributions to the study of culture and examines how historians have used these constructs to interpret the past.

ASPT 5464: Critical Security Studies. Provides an overview of the critical study of security in world politics. Introduces alternative conceptualizations of security to the military focused, state-centric security/strategic studies. Considers constructivist, post-structuralist and critical theoretic attempts to conceptualize the nature of security. Compares and contrasts these approaches with widely-accepted understandings of security in light of key debates in contemporary security studies.

ASPT 6014: Theories of Globalization. Examination of past and present eras of globalization through various theoretical perspectives. Addresses colonialism and emergence of western models for development of poor countries. Controversies about impacts of current globalization on the nation-state, cultures, ecosystems, and racial/ethnic/gender inequalities. Explores present trends, such as globalization of agriculture and food systems, industrial production, migration, human rights, and anti-globalization resistance.

ASPT 6104: Interdisciplinary Perspectives in Methodology. Addresses problems of methodology that face researchers pursuing theoretically informed interdisciplinary research involving words, objects, and images.
Provides exposure to disciplinary based and interdisciplinary methodologies. Emphasis on the methodological complexities of working in tandem with varied objects of analysis in theoretical and practical terms.

**ASPT 6124:** Pre-Modern Christian & Islamic Political Theory. Analysis of pre-modern Christian and Islamic political thought approached as comparative political theory. Integrates different genres (administrative handbooks, ethical writings, and philosophical treatises) from various Christian and Islamic cultural and religious settings.

**ASPT 6204:** Topics of Interdisciplinary Frameworks in Sociological, Political, Cultural & Ethical Thought. Topical seminar devoted to a significant problem in social, political, ethical and cultural thought. Integrates readings reflective of at least two of the four bodies of thought and theory addressed by ASPECT. Offers problem-centered, advanced exposure to interdisciplinary work. Team taught by two instructors with research expertise in the particular topic.

**ASPT 6224 (PHIL 6224):** Distributive Justice. Influential contemporary theories of distributive justice. Social, political, ethical, and cultural dimensions of distributive questions. Utilitarianism, liberalism, libertarianism, pluralism, multiculturalism, autonomy, rights, needs, (global) egalitarianism, and (global) poverty.

**DEPARTMENT OF COMMUNICATION**

**COMM 5014:** Communication Theory. A broad survey of contemporary theories and processes of interpersonal, public, and mediated human communication.

**COMM 5414:** Mass Media Effects. Explores major areas of theoretical study of mass communication and the social impact of mediated messages.

**COMM 5454:** Mass Media Theory. Survey of theory related to the production, content, form, consumption, effects, and social role of mass media.

**COMM 5464:** Media Literacy. Theories and practices related to critical analysis, critique and evaluation of contemporary media's role in shaping society.

**COMM 5514:** Public Relations Theory and Practice. Examines fundamental theory and research in public relations, including systems theory, symbolic interactionism, organizational theory, cognitive processing and persuasion; models of public relations practice; ethics.

**COMM 5524:** Organizational Communication. Theory and application of communication in organizational settings.

**COMM 5544:** Persuasion and Social Influence. Examines fundamental theory and research on persuasion and social influence. Emphasis on a broad-based perspective, encompassing the full scope of persuasion as it is found in everyday life. This course examines persuasion in a variety of contexts and settings, including advertising, small groups, and face-to-face encounters.

**COMM 5614:** Rhetorical Theory and Criticism. Survey of theories of rhetoric. Focuses on the multiple conceptions of rhetoric through history and the critical methods emerging from rhetorical theory.

**COMM 5634:** Social Movement Campaigns. Communication theories and methods of studying social movement campaigns. Rhetorical construction of social protest.
COMM 5814: Seminar in Communication Studies. Topical seminar examining various aspects of contemporary theory and research in interpersonal, public, and mediated human communication.

DEPARTMENT OF ENGLISH

ENGL 5024: Critical Theory in English Studies. Introduces graduate students to principal issues, concepts, terms, and methods currently employed in literary criticism and the interdisciplinary study of culture.

ENGL 5004: Theory & Practice in University Writing Instruction. The study of rhetorical theory, related issues in writing pedagogy, and the practice of teaching composition at the university level for GTAs in the Department of English.

ENGL 5054: Composition Theory. Study of history and theory of teaching composition at the university level. Introduction to research methods in Composition Studies. Detailed consideration of the epistemological and cultural implications of writing instruction.

ENGL 5064: Topics in Language. Rotating topics in language study, exploring various theories of language and their bearing on literary interpretation, rhetoric, and textual criticism.

ENGL 5104: Writing Project Invitational Instruction. Study of the theory, research, and practices of teaching, writing and educational leadership for participants selected for the National Writing Project. Introduction to research methods and overview of current research Composition. Study of collaborative learning theory and participation in an intensive writing workshop. Production of a substantial and varied portfolio of personal and professional texts.

ENGL 5454: Studies in Theory. Rotating studies of the major issues, figures, and movements in literary and critical theory.

ENGL 5734: Form and Theory of Fiction. A graduate course for writers of fiction in which students are taught to analyze the forms and theories which underlie the development of the genre. Students will be asked to critique the theoretical assumptions which have been applied to the genre and study the history and conventions that have shaped the writing of fiction. They will be required to interrogate the forms and prevailing theories which have shaped major novelists and short story writers, and apply what they discover to the crafting of their own fiction.

ENGL 5744: Form and Theory of Poetry. A graduate course for practicing poets and writers in which students are taught to analyze the forms and theories which underlie the development of the genre. Students will be asked to critique the theoretical assumptions which have been applied to the genre and study the history and conventions that have shaped the writing of poetry. Students will analyze prosody; imitate metrical forms, such as the sonnet and the sestina; and adapt the techniques used by poetic masters. Students will study the works of a wide array of writers, from Chaucer to contemporary poets. They will be required to interrogate the forms and prevailing theories which have shaped the voices of poets through the ages.

ENGL 5754: Form and Theory of Drama. A graduate course for practicing playwrights and writers in which students are taught to analyze the forms and theories which underlie contemporary playwriting. Students will be asked to critique the theoretical assumptions which have been applied to the genre and study the history and conventions that have shaped playwriting and performance. Special emphasis will be placed on the interplay between theory and performance, and the influence of aesthetics on dramatic form and performance practices as students learn to adapt those approaches to their own playwriting.

ENGL 6364: Research Design in Rhetoric and Writing. Theory and practice of evaluating, designing, and conducting empirical research projects in rhetoric and writing. Focus on critiquing studies, developing research
questions, selecting methods, and designing projects. Introduction to appropriate statistical concepts and methods as well as qualitative and hybrid methodologies.

**ENGL 6524: Theories of Written Communication.** Studies in theories applied to written communication.

**DEPARTMENT OF HISTORY**

**HIST 5024: Area Studies Methods.** Introduction to recent theories and methods in history, foreign languages, and literary studies, and geography with a focus on issues that have facilitated exchanges between the three disciplines. Practical aspects of Area Studies research are highlighted with particular reference to Latin America, the Caribbean, and Europe. The formulation of research problems using interdisciplinary approaches is given special attention.

**HIST 5104: Historical Methods.** Introduction to the theoretical frameworks and historiographical debates that inform the contemporary research and writing of history.

**HIST 5414: Topics In Cultural History and Theory.** A variable content course exploring the intersection of cultural theory and the discipline of history. Introduces important theoretical contributions to the study of culture and examines how historians have used these constructs to interpret the past.

**HIST 5424: Public History.** Introduction to the theoretical, interpretive, controversial, and practical issues facing public historians. Focus on interpretations and specific issues surrounding the presentation of history in museum exhibits, documentary films, photographic collections, community history projects, the Internet, and a variety of other public venues.

**HIST 5434: Oral History Methods.** Theory and methodology of oral history methods. Use of oral history interviews in historical research, questions of ethics, interpretation, and the construction of memory. Technical operations and a variety of interview techniques, transcription, and historical use of interviews.

**HIST 5934: Gender in U.S. History.** Theoretical approaches to understanding the role of gender in political, economic and social life and in popular culture. Survey of major themes and developments since the seventeenth century. Concentration on the development of biological and sociological explanations of gender differences and similarities, and on the evolution of gendered politics and work and family relationships. Emphasis given to class, race, ethnic differences and differences in sexual orientation.

**DEPARTMENT OF HUMAN DEVELOPMENT**

**HD 5104: Adult Development and Aging I.** Individual Development Introduction to theories and methods used to study adult development and aging. Provides students with a thorough in the scholarly literature in regard to the demographic, biological, functional, psychological, and social aspects of aging with a specific focus on individual development.

**HD 5114: Adult Development and Aging II.** Interpersonal Issues Interpersonal and social development across the adult phases of the life cycle. Integration of theory and research as it pertains to family and friend networks, living arrangements, diverse family forms, and critical life events such as widowhood.

**HD 5214: Theoretical Foundations of Child Development.** Selected theories related to child development.

**HD 5234: Cognitive Development: Infancy Through Adolescence.** In-depth study of developmental research and theoretical approaches to cognitive development.
HD 5334: Theories in Marriage and the Family. Overview of theory construction; in-depth study of various theories of family development and interaction; application of theoretical frameworks to research and analysis of the family; and consideration of the explanatory value of theory when examining the relationship of the family to the larger society.

HD 5344: Perspectives On Human Sexuality. Interdisciplinary historical consideration of writings, research, theory, and application of knowledge related to human sexuality.

HD 5404: Systems Theory and Family Therapy. Theory development and basic underlying assumptions of a systems framework to marriage and family therapy. Emphasis is on conceptualizing human problems as they are related to the functioning of systems.

HD 5424 (EDCO 5424): Life Span Development. Stages of individual development as they occur in the context of the family life course. Overview of current developmental theories. Impact of race, gender, and class on cultural views of developmental norms.

HD 5464: Adolescent Development. Advanced study of the physical, cognitive, social and emotional development of the adolescent with emphasis on theoretical issues, research findings, and application of theory and research. Implications for education are highlighted.

HD 5614: Human Development Theory. Literature and Applications Introduction to major theories of human development and application of these theories to understanding and improving the well-being of children, adults, couples, and families within complex social systems. Portfolio project: Preparation of a theoretically driven literature review.

HD 6014: Theory Construction in Human Development. Concepts, principles, and processes of theory construction; paradigms in human development and family studies; development of definitions; assumptions; propositions, and hypotheses; criteria for evaluating theory; and construction of theoretical statements. The prerequisite EDRE 6605 may be substituted for an equivalent course in research methods and statistics.

HD 6114: Theory And Research In Aging. Advanced course in gerontology. Review and critique of theoretical constructs and their research applications. Appropriate research designs and procedures for studying development in adulthood and old age.


DEPARTMENT OF POLITICAL SCIENCE

PSCI 5164 (GIA 5164) (UAP 5164): Collaborative Governance and Civil Society. Theoretical foundations of collaborative policy and governance approaches are examined. Strategies and methods for forming and sustaining collaborative coalitions are discussed. Case studies are used to illustrate the effectiveness of collaborative approaches in different policy domains.

PSCI 5214 (GIA 5214): Contemporary Political Theory. Selected topics in contemporary political theory, including different models of social science inquiry and the use of basic concepts like power, ideology, rationality, and the state in the study of politics.

PSCI 5244: Constitutionalism in Theory and Practice. The course investigates theories and practices of constitutionalism, both within the United States and more generally. It frames a number of questions about what characterizes constitutionalism as a distinctive theory of politics, while also examining the construction, maintenance, change, and destruction in practice of constitutional orders, constitutions, constitutional institutions, and other constitutional norms. Graduate standing required.

PSCI 5254 (GIA 5254): Global Conflicts. Examines theoretical issues in the study of global conflicts. Reviews theories of nationalism, states and territory as factors. Examines dynamics of contemporary conflicts from different regions of the globe as case studies illustrating theoretical issues. Reviews role of leaders in conflict processes.

PSCI 5444 (GIA 5444): International Politics. Theories of international organizations and relations among nations focusing on research in foreign policy formulation and implementation, international integration, conflict resolution, and global political economy.

PSCI 5504 (GIA 5504) (UAP 5504): Discourse Analysis. Examines the key theoretical sources and major practical applications of discourse analysis as a contemporary social science methodology. Origins, major variants, and critical uses of discourse analysis in cultural studies, semiotic methods, policy analysis, and organizational communication techniques also are considered.

PSCI 5534 (GIA 5534): Regionalism and Political Development. Provides a systematic review of regional organizations, the theories and factors that explain their recent emergence and an analytical framework for studying regional policy objectives such as peace and security, economic growth, environmental protection and the pursuit of human rights. Regional variations between Europe, Latin America, Asia, Africa and the Middle East are examined.

PSCI 5554: Culture, Politics and Society. in Network Environments Historical origins, institutional foundations, and theoretical interpretations of cultural, political, and social interaction through computer mediated communication are examined. Particular attention is given to new types of discourse, sources of power, and structures of society at all geographical levels in global computer and communications networks.


PSCI 5634: International Human Rights: Law, Politics and Practice. Theory and practice of international law for the protection of human rights. Legal instruments and institutions designed to protect international human rights and legal remedies available to victims of violations

DEPARTMENT OF SCIENCE AND TECHNOLOGY IN SOCIETY

STS 5014: Science and the Public. Theoretical and practical aspects of the public's role in the development, application, and oversight of scientific and technological advances.

STS 5105: Contemporary Issues in Science and Technology Studies. Theoretical and methodological issues addressed in the interdisciplinary social study of contemporary science and technology. 5105: social studies of science; 5106: social studies of technology. I
STS 5106: Contemporary Issues in Science and Technology Studies. Theoretical and methodological issues addressed in the interdisciplinary social study of contemporary science and technology. 5105: social studies of science; 5106: social studies of technology. II

STS 6314 (PHIL 6314): History of the Philosophy of Science. Philosophers of science from 1650 to 1900 with particular attention to the historical development of views about the methods of induction and hypothesis and accounts of theory testing. I

STS 6334 (PHIL 6334): Advanced Topics in Philosophy of Science. Variable topics in advanced philosophy of science, including major theories of scientific explanation and their criticisms; philosophical foundations of statistics; naturalized philosophy of science.

STS 6524: Critical Approaches to Science and Technology. Explores diverse traditions of criticism of Western science and technology. Focuses on feminist, Marxist, and ecological perspectives, as well as responses to critics from the scientific community. Prepares students for wider cultural debates about the costs and benefits of science and technology to society.


DEPARTMENT OF SOCIOLOGY

SOC 5034: Social Inequality. Perspectives on the sources and consequences of social inequality. Comparative analyses of the dynamic social construction of differentiation based on such markers as class, race, ethnicity, gender, age, religion, and sexual orientation, and the opportunities and constraints for life chances afforded by these processes.

SOC 5104: History of Sociological Thought. Examination of the social thinkers of the classical period in the development of sociological theory (e.g., Marx, Durkheim, Weber, Ward). Particular attention to the theories, methods, and goals developed by early sociologists.

SOC 5114: Contemporary Sociological Theory. Focus on sociological theorists since World War II, including Parsons, Merton, Dahrendorf, Coser, Homans, Blau, Blumer, Kuhn, and Garfinkel.


SOC 5604: Organizations in Society. Review of major theories and dimensions of modern organizations, especially technological and managerial arenas influenced by class and power. Labor processes internal to organizations and power networks among organizations. Includes cross-national comparisons.

SOC 5654 (GEOG 5654): The Global Division of Labor. Theory and research on the globalization of the division of labor during the recent past as well as over the past several centuries. Examines the development of the capitalist world-system including the role of technological forces; the roles of transnational corporations and states in the global economy; the effects of globalization on work and quality of life in the U.S., other developed countries, and the Third World; analyses of globalization in the manufacturing and service sectors; and possible solutions for problems associated with globalization.
SOC 6414: Theories of Crime and Delinquency. Examination of major theories of crime and delinquency, with application to specific examples, such as white-collar crime, gender-based patterns of crime and delinquency, and juvenile gangs. Also covers theories and issues concerning the control and prevention of crime and delinquency.

SOC 6504: The Sociology of Culture. Examination of sociological theory and research on culture, including theories of culture and society; culture as social practice; culture, class and identity; culture and collectivities; culture, power and institutions; the production of culture; cultural reception.

SOC 6524: Sociology of Health. Examination of sociological theory and research on how social structures and social processes influence the health of individuals and populations. Emphasis on the health consequences of social inequalities by race, class, and gender; the effects of social contexts, networks, and institutions on health; and issues in health care.

SOC 6664: Application of Structural Equations in Education. Applications of structural equation causal models in educational research and discussion of the methodological questions pertaining to such models. Topics include recursive and non-recursive models, measurement errors in causal models, latent unobserved variables, and covariance structures.

AFST 5234: Research Methods in Africana Studies. Examination of the two dominant paradigms in Africana Studies and their corresponding research methods. Topic areas include: purpose of research, the role of the researcher, the role of theory, methods used for data collection, and valid evidence for both paradigmatic approaches. (Only a course number was listed for this class.)

AFST 5134: Theories in Africana Studies. Focuses on theories of the relationships between race, gender, class, culture, social structure, and power as they impact the lives of Africana people. Critical examination of five major theoretical approaches: critical race theory, social isolation, internal colonialism, racial formation, black feminist. (Only a course number was listed for this class.)

WGS 5914: Feminist Theory. This graduate seminar covers the interdisciplinary scholarship aimed at explaining sex-based inequality and examines the gender ideologies that rationalize sex-based inequality. The seminar covers important "classic" texts in feminist theory, the intellectual and political roots for that theory, as well as contemporary texts and debates. Graduate standing required.

WGS 5924: Feminist Research Methodologies. Capstone course investigating and applying epistemologies of feminist methodologies, as well as feminist theory and meta-methodology, to student's interdisciplinary, feminist scholarship.